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INTERNATIONAL INSTITUTE OF AGRICULTURE
BUREAU OF ECONOMIC AND SOCIAL INTELLIGENCE

INTERNATIONAL REVIEW OF AGRICULTURAL ECONOMICS

(MONTHLY BULLETIN OF ECONOMIC AND SOCIAL INTELLIGENCE)

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(*e*) study questions concerning agricultural co-operation, insurance, and credit from every point of view; collect and publish information which might prove of value in the various countries for the organization of agricultural co-operation, insurance and credit;

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EXPLANATORY NOTE

1. *The present Table of Contents refers to the twelve numbers of the* International Review of Agricultural Economics *published from January to December,* 1916, *and includes, therefore, all the articles and notes dealing with co-operation, insurance, credit and agricultural economy in general contained in these volumes.*

2. *The articles and notes relating to co-operation have been grouped in* 25 *classes; those dealing with insurance are divided into* 11 *classes; those which deal with credit into* 8 *classes; and those which treat of agricultural economy in general into* 18. *A complete list of these classes precedes the table. In our classification we have followed the rule of single entry and placed under only one heading those articles and notes which, from the nature of the subject treated, might appear in more than one group.*

As it is not in every case clear why an article or note has been assigned to one group rather than to another, the reader must be prepared to refer to the several analogous groups in any one of which a particular article or note might appear. A dairymen's co-operative society, for example, might have as its object the protection of the general economic interests of dairy farmers as a class, or simply the improvement of the methods of production, transport, and sale, or again the purchase and collective use of animals of the special dairy type. An article relating to such a society might appear under various headings, according as it dealt more particularly with one or other of these objects.

3. *In each group the articles and notes have been subdivided by countries, following the aphabetical order. For each country the articles are arranged in the chronological order in which they were published. We have added a table giving the classification by countries.*

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BUREAU OF ECONOMIC AND SOCIAL INTELLIGENCE

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Part I: Co-operation and Association

AUSTRIA.

AGRICULTURAL CO-OPERATION IN SILESIA.

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BERICHT DES ALLGEMEINEN VERBANDES LANDW. GENOSSENSCHAFTEN IN OESTERREICH ÜBER SEINE. TÄTIGKEIT IN DEN JAHREN 1905, 1906 UND 1907. 1. TEIL (*Report of the General Federation of Agricultural Co-operative Societies in Austria upon its work in the Years* 1905, 1906 *and* 1907. 1st *Part*). Vienna, 1908.

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NACHRICHTEN DES VERBANDES DER SPAR- UND DARLEHENSKASSENVEREINE IN SCHLESIEN. JAHRGÄNGE VOM 1896 AN (*News of the Federation of Rural Loans and Savings Banks in Silesia. Years from* 1896 *onwards*).

INTRODUCTION: GENERAL OBSERVATIONS.

Austrian Silesia is bounded on the North and West by Prussian Silesia, on the South by Moravia and Hungary and on the east by Galicia. The northern part of Moravia, consisting of the district of Mistek, extends into Austrian Silesia and separate it into two portions, the former circles of Teschen and Troppau.

Austrian Silesia covers 5,147 square kilometres, or 1.72 % of the area of Austria, and in 1911 it had 758,665 inhabitants in 498 communes and 697 fractions with 86,000 houses. Of the population, 41.25 % are engaged in agriculture, 42.12 % in manufactures, 6.66 % in trade, and 9.97 % are in the public services or belong to the liberal professions.

The soil of Silesia is cultivated as follows: 254.106 ha. are arable land, 6.695 ha. are gardens and 62,087 ha. meadows and pasture land, 175,835 ha. are covered with forest and 149 ha. are lakes or marshes. Of the total area 49.4 % is arable, 5.8 % is meadow land, 1.3 % market gardens, 6.2 % pasture land, and 34.2 % forest; lakes or marshes cover 0.02 % and 3.1% represent areas exempt from taxation.

In 1912, 126,698 quintals of wheat and 583,782 quintals of rye were produced; the barley crop was 298,767 qls., the oats crop 710,253 qls., and potatoes yielded 2,706,886 qls. The sugar beet yield was 537.263 qls., and the yield of beetroot for cattle food 860,491 qls. Clover yielded 1,061,609 quintals of hay; and the meadows 696,343 qls. The fruit produced amounted to 180,000 qls. According to the cattle census of 1910, Silesia had 31,769 horses, 196,526 oxen, 35,672 goats, 144,209 pigs and 5,748 sheep.

In 1912 Silesia produced 70,533,967 qls. of coal valued at 74,137,273 crs. In regard to manufactures it is to be observed that the textile industries flourish; the woollen manufactures of Bielitz, Troppau, Jägerndorf, Teschen, etc., are well known and they supply wollen goods to the whole of Austria as well as exporting abroad. Silesia also produced sugar, beet, chemical products, porcelain, etc. (1).

§ 1. Origin and development of agricultural co-operation in Silesia.

Silesian agricultural co-operation dates from about 1880. Economic organisations were indeed to be found in the towns even earlier, but they represented urban interests more than anything else and maintained relations with the country only in so far as was absolutely necessary for the development of their activity.

Rural economic conditions, above all those of rural credit, were at the time deplorable; the absence of any agricultural credit institute had disastrous results for the whole rural economy of the country. The characteristics of this period are the dependence of the peasants on the urban credit organisations, the increasing dearness of credit and the complete tyranny of the usurers. Everywhere, even amongst the smallest farmers, it was felt that this state of things could not be endured and a way must be found to rescue the farmers from their painful position. So the first Raiffeisen banks were founded, a large number of them between 1888 and 1894.

(1) See *Oesterreichisches statistisches Handbuch, XXXI Jahrgang*, 1912 Vienna, Gerolds Sohn, 1913.

To form an idea of the difficulties against which the agricultural classes of Silesia had to contend, it is enough to read the reports of the oldest of these societies; mention is there made of interest at the rate of 365 % exacted by the merciless usurers, above all in West Silesia.

One of the most active promotors in Silesia of the system and ideas of F. W. Raiffeisen was Prof. A. Kaiser, who was efficiently seconded by Dr. A. Kulisz. After visiting Neuwied and many other co-operative societies of the district in 1880, Kaiser began an active propaganda among the farmers of the whole region; his work had almost immediate success and almost all the older Raiffeisen societies of Northwest Silesia owe their foundation to his efforts. At the same time, in Middle Silesia, in the district of Troppau and Jägerndorff, the Imperial and Royal Agricultural and Forestry Society of Austrian Silesia (*Österr.-schles. Land- und Forstwirtschaftsgesellschaft*) was doing useful work in the same direction, principally by means of its secretary Kollatschek; to the action of this society is also due the foundation of the Federation, as we shall presently see.

In 1887-1888 the Diet of Silesia took into consideration the question of granting subventions to the Raiffeisen societies, and on October 5th., 1888, decided to grant subventions as well as loans of not more than 1,000 fl. at 3% to be repaid in at most five annuities. Afterwards these societies were granted the privileges accorded by the laws No. 91 of June 1st., 1889 and No. 111 of June 11th., 1894, in respect of reduction of stamp duty and other dues for rural banks.

In 1893 the movement in favour of the creation of a strong co-operative credit organisation in Silesia increased in importance especially through the action of the above mentioned Agricultural and Forestry Society of Troppau and of E. Türk of Bielitz. Official statistics of the Raiffeisen societies published at that date contain the following information on the subject: in 1886 one Raiffeisen society was registered; in 1888, two; in 1889, four; in 1890, one; in 1891, two; in 1892, eight; in 1893, sixteen; in 1894, twelve. Thus altogether, between 1886 and 1894, as many as 46 societies had been registered.

But, hardly were the first difficulties overcome, when the need was felt of federating the various banks for their common objects; in fact they were delicate institutions requiring an orderly and unexceptionable management in order to gain and keep that public confidence, on which their very existence depends. In a word, the need was felt for a common organisation to direct the movement and promote its extension and give it unity of aim and a uniform character. The above mentioned society has the merit of having prepared the ground for this organisation by means of extensive propaganda among the existing agricultural co-operative credit associations and having started the idea and promoted the foundation of the organisation. It must be remembered that at that date there was only one Federation of the kind in Austria, the German Moravian Federation, so that the constitution of the Silesian Association had still the character of a novelty the importance and advantages of which could not then be foreseen.

The " Federation of the Rural Loan and Savings Banks of Silesia, a Registered Limited Liability Company " (*Verband der Spar- und Darlehenkassenvereine in Schlesien, r. G. m. b. H.*) was founded at Bielitz on January 14th., 1894; of the 24 rural banks represented in the Constituent assembly, 17 at once became Members of the Federation. Its principal objects are:

(1) to promote co-operation generally and especially that for the development of personal credit and thrift in the farming class;

(2) to favour the development and progress of the co-operative societies by means of improved rules and an orderly and uniform conduct of technical and administrative business;

(3) to supervise their working with the help of ordinary and special inspections;

(4) to defend and watch over their moral, material, legal and administrative interests;

(5) to develop and direct the business of credit, purchase and sale, and promote relations of mutual interest, and every possible form of mutual assistance;

(6) to prepare complete co-operative statistics;

(7) to found a central financial institute, a federal bank to act as a clearing house for the several credit societies, supplying them with the funds they need and investing their surplus funds for them.

Every member had to take four shares in the federation at 25 Austrian florins each paid up, and to give a garantee up to five times the amount of the shares taken.

In terms of § 66 of the rules, the Junta of the Silesian Diet has the right to inspect the documents and books of the Federation at any moment, to examine the cash in hand and the management of affairs and to demand explanations on any matter connected with the Federation; to summon the Council of Supervision (*Anwaltschaftsrat-Aufsichtsrat*) and the General Congress (*Verbandstag*) to examine and decide on proposals made by the Junta itself.

The Junta is further invited to take part in the Meetings of the Board of Management and the federal meetings, and has a right to be represented at them by a delegate who may address the meetings but not vote.

The Junta has made extensive use of these rights every year.

The difficulties the Federation had to overcome were many and various: but it overcame them all and at once attained a strong position and won the unlimited and unconditional confidence of the members. This success deserves to be mentioned here, because the Silesian Federation was, as we have said, the first institution of the kind in Austria; there was, therefore, a lack of that experience, which has facilitated the path of all institutions of the kind that were founded later.

In this case everything had to be created *ex novo* and it may be fairly stated that the Silesian Federation became the model for similar institutions in other provinces of the Empire.

We shall give the following further statistics for this period. On January 30th., 1894, the Diet granted, at the request of the Agricultural and

Forestry Society of Austrian Silesia, a subvention of 500 fl. to the Federation, which had only just been formed, and thus helped in the foundation and work of the institution. When the respective general meetings of the several rural banks had confirmed their affiliation to the Federation, the latter was able to make application for registration, and was registered on May 15th., 1894 (notification of the Imperial Royal Provincial Tribunal of May 15th., 1894, No. 4,968). The actual affiliation of the 17 rural banks, and the registration of the Federation permitted of the convocation of the first meeting of the Council of Supervision to be formed: the meeting was held on June 10th. and 11th., 1894, at Troppau and there a large programme of work entered on the agenda was fully dealt with.

On November 1st., 1894, the Central Bank was founded; its foundation completed the work undertaken for the organisation of rural co-operative credit and filled a gap which was keenly felt and hindered the wider diffusion of rural banks in the country. The Central Bank served above all for the investment of surplus cash at suitable interest, with every security for the capital, while it provided the funds required for the work of the rural banks on easy and favourable terms.

The Central Silesian Bank has no financial management of its own; the work was undertaken by the Bielitz Branch of the Bohemian Union bank, which has arranged suitable rates of interest with the Central Bank.

The *Communications* of the Federation (No. 10 of July 4th., 1895) show that the federated banks had increased to 26 by that date.

On March 1st., 1896, there appeared the first number of the organ of the Federation under the title of "Nachrichten des Verbandes der Spar- und Darlehenskassenvereine in Schlesien" (*News of the Federation of the Rural Loans and Savings Banks of Silesia*). Before this date some of the information regarding the Federation was published in the "Oesterreichische-schlesische landwirtschaftliche Zeitung" (*Agricultural Journal for Austrian Silesia*) and some separate papers called "Mitteilungen" (*Communications*).

In 1896 the question of amending the rules so as to include in the Federation all co-operative societies which serve agricultural purposes was for the first time considered, but the amendment in this sense could not be carried at that date. The matter remained in suspense until 1901, when it was decided to include them, as is related below. In 1896, again, the Federation was charged to act as a medium in obtaining credit on mortgage.

In 1897 there was a new and very considerable increase in the number of federated societies. Since 1898 courses of technical instruction have been held at Bielitz for the staff of the rural banks with the object of rendering the system of bookkeeping uniform. The Federation gives certificates showing attendance and results of the instruction, and these serve to show the ability of the candidate to keep books on the system approved by the Federation and this certificate facilitates the students in finding situations in the federated societies as bookkeepers and cashiers in the Rural Banks.

In the meeting of the Board of Management and the general meeting held at the same time on October 26th. and 27th., 1897, it was decided that the

Silesian Federation should enter the General Federation of Agricultural Co-operative Societies of Austria, Vienna.

At the end of 1898 the federated rural banks of Silesia were 99 in number.

In 1901 amendments were introduced into the rules of the Federation. This was necessary in order that provision might be made in them for rules in regard to collective purchase of articles of consumption. The amendments were approved in the Federal Meeting of August 28th., 1901, and by decision of the Imperial and Royal Provincial Court of Troppau of September 24th., 1901, they were entered in the register of co-operative societies. The Federation since that date has been styled Federation of Agricultural Co-operative Societies of Silesia, Registered Society, Ltd.

In place of the Council of Supervision, a Presidential Board was established consisting of 5 members and, in addition to this, a Council of Supervision, consisting of nine members.

The object of the Federation was now better defined and its functions also extended so that it was made the medium for obtaining credit on mortgage for the members of the federated societies, for purchasing goods and farm requisites, and for manipulating, preparing for use and selling the produce of members of the Federation and for founding other institutions to serve to encourage agriculture and improve agricultural practice.

The value of the shares (50 cr., every society, as above said, having to hold at least 4) was not altered; it was, however, laid down that every federated society with more than 100 members must take and pay for another share of equal value for every 25 members over the 100.

Individual members of the board of management of the Federation had to purchase at least one share of the above value and give a guarantee in the same way as the other members for an amount equal to 20 times the value of his shares.

The number of the federated societies had risen on January 14th., 1904, to 152, and of these 136 were rural loan and savings banks; 9 were co-operative dairies; 4 were co-operative distilleries, 2 co-operative mills and 1 an agricultural association.

On the coming into force of the new law on inspection of co-operative societies of June 10th., 1903, Boll. L. I. No. 133, by which the inspection of co-operative societies every two years was made compulsory, the Federation was authorized, by notification of the Lieutenant Governor of Silesia of August 7th., 1903, No. 19,571, to appoint inspectors for the societies affiliated to it; in a word, its right to inspect the work of the societies affiliated to it was recognised.

On the occasion of the floods of July 12th. and 13th., 1903, which were a veritable catastrophe for the farmers in Silesia, it could be seen what was the power of resistance and the strength of the organisation of agricultural credit on a co-operative basis in Silesia and above all that of the Central Bank, which was seen in its allowing its debtors to delay payment and in the liberal grant of loans in the regions affected.

The Federal Meeting of June 23rd., 1904, decided on a new amendment of the rules of the Federation, above all in regard to the federal shares. Their value was reduced to 10 crs.; their number is fixed by the presidential board

according to the special conditions of each federated society but every federated member must take at least three and only as an exception may possess more than 60. The former shares of 50 crs. value were therefore divided into five equal parts each, but there was no partial refund on them, nor were the provisions in regard to guarantee modified.

The Federation followed with special interest the development of the societies for production in the region, especially that of the co-operative dairies.

The year 1905 deserves mention as of capital importance in the history of the Federation. Owing to the difficulties besetting Silesian agriculture in 1903 and 1904, the Government was obliged to grant extensive assistance in the region under the name of *Notstandsaktion* ; the Viennese Departments of Agriculture and Home Affairs and the Silesian Diet all took part in the work. Their action included the supply of large quantities of fodder, seeds and foodstuffs. The Silesian Federation received a total supply of 1,250 truckloads valued at 1,232,205 crs.

From the date of its foundation in 1894 up to 1907, the Federation had only to register a continuous increase in the number of federated societies ; in 1908, however, there was a sudden important decrease due to the secession of 57 Polish rural banks, which joined the newly founded Polish Silesian Federation with headquarters at Teschen. The secession of these banks was due to purely racial causes. The total number of Polish Banks that left the Federation was 67 ; 28 Polish banks, however, remained in the German Federation.

§ 2. Agricultural co-operation in Silesia from the foundation of the Federation of Agricultural Societies in Silesia up to 1913 (1894-1913).

A. — *Rural Loan and Savings Banks.*

As we have just stated, in the period from 1894, when the Federation was founded, up to 1907 the number of the rural banks increased continually. In 1908, however, there was a large decrease, due to the sudden secession of as many as 47 banks, all Polish, the number of seceders increasing in 1909 to 67 ; they joined the new Polish Federation with headquarters at Teschen. Since then the number of federated banks has remained stationary, as it has reached the limit required in the region.

In the following table we show the number of Raiffeisen Banks that have joined and left the Federation and that of those actually federated. We also give figures in regard to the nationality of the banks.

TABLE I. — *Raiffeisen Banks Federated between* 1894 *and* 1913.

Year	Affiliations				Secessions				Actual Number			
	German	Polish	Czech	Total	German	Polish	Czech	Total	German	Polish	Czech	Total
1894	19	—	—	19	—	—	—	—	19	—	—	19
1895	7	2	—	9	—	—	—	—	26	2	—	28
1896	22	5	1	28	—	—	—	—	48	7	1	56
1897	8	5	—	13	—	—	—	—	56	12	1	69
1898	15	12	3	30	—	—	—	—	71	24	4	99
1899	6	7	1	14	—	—	—	—	77	31	5	113
1900	3	5	—	8	—	—	—	—	80	36	5	121
1901	1	3	—	4	—	—	2	2	81	39	3	123
1902	2	4	—	6	—	—	—	—	83	43	3	129
1903	2	3	—	5	—	—	—	—	85	46	3	134
1904	5	8	—	13	—	—	—	—	90	54	3	147
1905	4	4	—	8	—	—	1	1	94	58	2	154
1906	—	8	—	8	—	—	—	—	94	65	2	161
1907	—	7	—	7	—	—	—	—	94	72	2	168
1908	2	8	—	10	1	46	—	47	95	34	2	131
1909	4	9	—	13	—	21	—	21	97	24	2	123
1910	2	5	—	7	—	—	2	2	101	27	—	128
1911	2	—	—	2	—	—	—	—	103	27	—	130
1912	1	—	—	1	1	—	—	—	103	27	—	130
1913	3	1	—	4	—	—	—	—	106	28	—	134

The general progress of the Silesian Credit societies in 1911 and 1912 is shown in the following table giving figures for 130 rural banks.

TABLE II. — *General Progress of Credit Societies.*

Particulars	Situation at the End of 1911 (130 Banks) — Crowns	Situation at the End of 1912 (130 Banks) — Crowns	Increase (+) or Decrease (—) in amount — Crowns
Shares in the Federation	262,133.38	296,044.47	+ 33,911.09
Loans Received	1,995,802.09	2,515,249.78	+ 519,447.69
Savings Deposits	19,326,011.50	20,211,229.46	+ 885,217.96
Loans Made	15,538,637.46	18,133,967.95	+ 2,595,330.19
Goverment Securities	304,754.80	248,209.46	— 20,545.40
Profits	67,009.71	76,086.02	+ 9,076.31
Losses	440.70	2,392.12	+ 1,851.42
Working Expenses	36,985.92	44,606.78	+ 7,620.86
Reserve Funds	395,835.51	448,643.46	+ 52,807.95
Total Business done (incomings and outgoings)	28,808,650.02	34,079,546.60	+ 5,270,896.58

The above table needs no comment : the figures, in fact, speak for themselves. We shall only remark the regular increase in the amount of federa- shares, only stopping in 1908, in which year there was a decrease of 66,000 crowns, an amount less than we should expect in view of the withdrawal from the Federation of a third of the rural banks ; but in 1912 the amount had again increased by 74,341 crs. The withdrawal of the Polish Banks caused a decrease of 1,700,000 crs. in the savings deposits, but at the same time there was also a decrease of almost 3,000,000 crs, in the amount of the loans. The reserve funds showed a loss in 1907-08 of 18,000 crs, but in 1912 an increase of 169,000 crs.

Table III gives the most important figures in respect to the number of *members* ; while in the first 13 years the members increased regularly and in the four succeeding years the average figures remained 105 per bank, in 1912 there was a considerable increase up to the amount of 119 members per bank.

The decrease in the average number of members per bank observed in 1908 was above all due to the loss of the members of the Istebna Polish Rural Bank, which withdrew just then, and had 578 members, an exceptional number compared with that of the other banks of the region.

For the rest, almost all the Polish banks have proportionally more members than the German, while the amount of contribution to the Federation paid by each individual Polish member is less than that paid by the German members.

TABLE III. — *Credit Societies: Members.*

Year	Number of Banks	Number of Members	Average membershap per Bank	Increase in average membershap	Decrease in average membershap	Percentage
1894	19	1,222	64	—	—	—
1895	28	1,552	55	—	9	14
1896	56	3,485	67	12	—	22
1897	69	4,903	71	4	—	6
1898	99	6,917	69	—	2	2
1899	113	9,099	80	9	—	13
1900	121	10,181	84	4	—	5
1901	123	11,441	93	9	—	10
1902	129	12,398	96	3	—	3
1903	134	13,928	102	6	—	6
1904	147	15,379	103	1	—	1
1905	154	17,162	111	8	—	8
1906	161	18,015	117	6	—	5
1907	168	19,314	115	—	2	1
1908 (1)	131	12,665	105	—	10	8
1909	123	12,995	105	—	—	—
1910	125	13,456	105	—	—	—
1911	130	13,860	106	1	—	—
1912	130	15,577	119	13	—	11

(1) Year of Foundation of the Polish Federation.

In 1912, the amounts of the shares held in of the Federation (*Geschäftsanteile*) increased considerably in comparison with the previous year, and the average per individual member was almost 20 crs. Generally we find that the average situation improved after the withdrawal of the Polish societies. In 1907 the average amount of shares per member was not above 15.16 crs; in 1908 it was already 18.47 crs., whilst in the last working year considered it was as much as 19.73 crs.

According to the statistics for 1912 :

For 84 banks the average amount of shares held per member was 20 crs.
» 5 » » » » » » » 12 »
» 4 » » » » » » » 50 »
» 37 » » » » » » » 10 »

Table IV shows the figures for the Federal shares in the period 1894-1912.

TABLE IV. — *Credit Societies*: *Federal Shares.*

Year	Number of Banks	Number of Members	Total of Federal Shares Paid — Crs.	Increase — Crs.	Average Amount per Bank — Crs.	Average Amount per Member — Crs.
1894	19	1,222	22,526.62	—	1,185.60	18.42
1895	28	1,552	34,572.54	12,045.92	1,234.72	22.24
1896	56	3,485	68,008.84	28,436.30	1,211.70	18.06
1897	69	4,903	86,581.44	23,572.60	1,254.80	16.02
1898	99	6,917	113,247.68	26,666.24	1,132.46	16.38
1899	113	9,099	148,460.38	35,212.70	1,313.80	16.30
1900	121	10,181	169,321.92	20,861.54	1,399.36	16.63
1901	123	11,441	184,278.85	14,956.93	1,474.23	16.10
1902	129	12,398	199,580.95	15,302.10	1,559.22	16.10
1903	134	13,928	221,415.24	21,834.29	1,628.05	15.89
1904	147	15,379	245,490.19	24,084.95	1,670.00	16.36
1905	154	17,162	266,741.72	21,251.53	1,732.08	15.69
1906	161	18,015	268,984.71	2,242.99	1,689.34	14.94
1907	168	19,314	288,155.77	19,171.06	1,715.21	15.16
1908	131	12,665	221,694.86	—	1,847.45	18.47
1909	123	12,995	226,471.57	4,776.71	1,841.22	17.42
1910	125	13,456	239,273.95	12,802.38	1,884.04	17.78
1911	130	13,860	262,133.88	22,859.93	2,016.40	18.99
1912	130	15,577	296,044.47	33,910.39	2,277.26	19.73

The *rate of interest* per rural loan and savings bank in Silesia remained almost unvaried, during the period 1894-1912. In most cases the rate of interest on deposits remained at 4 % and that on loans varied from 4 ½ % to 5 %.

Table V and VI contain the principal statistics relating to the rate of interest in the 19 years between 1894 and 1912; the first relates to savings deposits, the second to loans made.

TABLE V. — *Credit Societies: Savings Deposits (Rate of Interest).*

Year	Number of Banks	Rate of Interest on Savings Deposits													
		3	3 ¼	3 ½	3 ½	3 ⅝	3·7	3 ¾	3 ⅘	3·9	4	4 ¼	4 ½	4 ¾
		Number of Rural Banks												
1894	19	—	—	—	—	1	—	—	—	—	18	—	—	—
1895	28	—	—	—	—	1	—	—	—	—	27	—	—	—
1896	56	—	—	—	2	1	—	—	—	—	53	—	—	—
1897	69	—	—	—	2	2	—	2	1	—	62	—	—	—
1898	99	—	—	—	3	3	—	4	2	—	87	—	—	—
1899	113	—	—	—	3	6	2	2	1	—	99	—	—	—
1900	121	—	3	—	3	7	2	8	2	—	95	—	1	—
1901	123	—	—	—	5	5	3	10	2	—	96	1	1	—
1902	129	—	—	—	6	6	2	11	2	—	100	—	2	—
1903	134	—	—	—	8	7	1	15	1	—	102	—	—	—
1904	147	—	—	—	7	7	1	15	1	—	114	1	1	—
1905	154	—	—	—	7	7	1	17	1	—	117	2	2	—
1906	161	—	—	1	6	5	1	11	2	—	130	4	1	—
1907	168	—	—	—	6	5	1	10	3	—	137	5	1	—
1908	120	—	—	—	6	2	—	11	4	—	93	3	1	—
1909	120	1	—	—	6	2	—	11	4	1	88	4	2	1
1910	125	1	—	1	5	2	—	12	4	—	90	8	2	—
1911	130	—	—	—	5	1	—	14	2	—	97	7	3	1*
1812	130	—	—	—	2	1	—	8	2	—	92	8	16	1**

* 4.1 %.
** 5 %.

TABLE VI. — *Credit Societies*: *Loans Made* (*Rate of Interest*).

Year	Number of Banks	Rate of Interest on Loans made														
		4	4 1/4	4.3	4 3/8	4 1/2	4 5/8	4.7	4 3/4	4 4/5	4.9	5	5 1/4	5 1/2	5 3/4	6
		Number of Rural Banks														
1894	19	—	—	—	—	3	—	—	1	—	—	14	1	—	—	—
1895	28	—	—	—	—	4	—	—	1	—	—	23	—	—	—	—
1796	56	—	—	—	—	6	—	—	1	—	—	47	1	1	—	—
1897	69	—	—	—	—	15	—	—	4	—	—	48	—	2	—	—
1898	99	—	—	—	—	21	1	—	3	1	—	70	—	3	—	—
1899	113	—	—	—	—	25	2	—	3	—	—	79	—	3	—	—
1900	121	1	—	1	—	29	3	1	3	—	—	80	—	2	—	—
1901	123	—	—	1	—	31	1	1	3	—	—	82	—	2	—	—
1902	129	—	1	1	1	34	1	1	6	—	—	79	—	4	—	—
1903	134	1	1	1	1	35	3	—	8	—	—	85	—	2	—	—
1904	147	1	3	1	1	42	3	—	7	2	—	85	—	2	—	—
1905	154	1	2	1	1	47	3	—	7	2	—	87	—	3	—	—
1906	161	1	3	1	1	35	2	—	11	2	—	96	3	6	—	—
1907	168	1	3	1	2	35	3	—	11	1	—	103	5	3	—	—
1908	120	1	1	1	2	42	3	—	11	1	—	54	2	2	—	—
1909	120	2	—	4	2	45	2	—	14	—	—	48	2	1	—	—
1910	125	1	2	3	2	44	3	—	12	1	1	54	2	—	—	—
1911	130	1	—	3	2	46	3	—	12	1	—	57	3	2	—	—
1912	130	—	1	2	1	48	3	—	11	2	1	39	8	12	1	1

The amount of the *loans received* by the Silesian rural banks at the end of 1912 was 2,515,249 crs., with an increase of 500,000 crs. on the preceding year. In 1911 the increase was even greater, being more than 1,000,000 crs. as compared with 1910. Although the increase in 1912 was remarkable, and the more so when compared with the period from 1906 to 1910, the amount of the loans received shows, with a single exception, a constant decrease.

The continual increase in amount of the loans received, so that in 1911 it was double what it was in 1910 and in 1912 increased by a fourth of the amount in 1911, shows that the demand for credit among the Silesian farmers is constantly increasing and that their economic situation is far from prosperous.

Table VII show the total amount of the loans received by the Silesian rural banks in the different years.

TABLE VII. — *Credit Societies* : *Loans Received.*

Year	Number of Banks		Total Loans Received — Crs.	In comparison with the Preceding Year	
	Total	That have Received Loans		Increase — Crs.	Decrease — Crs.
1894	19	10	17,000.00	—	—
1895	28	14	29,638.00	12,638.00	—
1896	56	26	140,960.00	111,322.00	—
1897	69	39	271,364.42	130,404.42	—
1898	99	57	430,518.44	159,133.82	—
1899	113	62	406,791.24	—	23,727.20
1900	121	69	597,807.19	191,015.95	—
1901	123	67	649,615.26	51,808.07	—
1902	129	71	905,721.31	256,106.05	—
1903	134	71	1,081,871.16	176,149.85	—
1904	147	76	1,259,898.11	178,026.95	—
1905	154	98	1,617,396.15	357,498.04	—
1906	161	61	1,009,995.87	—	616,400.28
1907	168	63	978,369.32	—	31,626.55
1908	120	27	463,495.91	—	514,873.41
1909	120	37	881,077.03	417,581.12	—
1910	125	46	861,636.95	—	19,430.08
1911	130	40	1,995,802.09	1,134,165.14	—
1912	130	53	2,515,249.78	519,447.69	—

The *savings deposits* of the 130 rural banks amounted in 1912 to 20,211,229.46 crs., as compared with 19,326,011.50 crs. in the preceding year.

The increase is more than 750,000 crs., whilst in 1911 it was about 2,250,000 crs. The decrease it to be attributed to the causes already mentioned, that is to the increased necessity of contracting loans and the fact of the loans being made largely with the help of the deposits.

Of the 130 rural banks in 1912, 52 had savings deposits for an amount of less than 100,000 crowns, 74 for an amount of up to 500,000 crs., while

4 had more than 500,000 crs. in deposit. The smallest sum held in deposit in these Banks, was 2,770.50 crs., the largest 882,586.26 crs.; the average amount per bank was 155,470.99 crs.

As seen in Table VIII, the largest increases in the savings deposits were realised in 1899, with more than 1,500,000 crs., in 1901 with more than 1,000,000 crs., in 1902 with almost 2,500,000 crs., in 1907 with more than 2,250,000 and in 1911 again with more than 2,250,000 crs.

At the end of 1912, quite 50 banks, or 38% of the total number had savings deposits in excess of the general average amount above mentioned.

TABLE VIII. — *Credit Societies*: *Savings Deposits.*

Year	Number of Banks	Savings Deposits — Crs.	Increase — Crs.	Average amount per Bank — Crs.
1894	19	684,783.92	—	34,147.48
1895	28	1,021,093.82	372,309.90	36,467.78
1896	56	1,762,328.75	741,234.93	33,890.92
1897	69	2,392,916.88	630,588.13	34,679.94
1898	99	3,206,734.03	813,817.15	32,067.34
1899	113	4,821,269.13	1,614,535.10	42,666.08
1900	121	5,791,581.80	970,312.67	47,864.31
1901	123	6,815,513,40	1,023,931.60	55,410.67
1902	129	9,223,786.25	2,408,272.85	68,935.82
1903	134	9,282,443.65	58,657.40	68,253.26
1904	147	11,075,361.60	1,792,917.95	74,331.29
1905	154	12,278,495.64	1,192,934.04	79,730.49
1906	161	14,003,798.96	1,725,303.32	87,523.74
1907	168	16,265,790.12	2,261,991.16	96,820.17
1908	120	14,510,385.58	*	120,919.87
1909	120	15,778,539.45	1,267,153.87	131,487.78
1910	125	17,039,884,69	1,261,345.24	136,319.07
1911	130	19,326,011.50	2,286,126.31	148,663.93
1912	130	20,211,229.46	885,217.96	155,470.99

* Decrease of 1,755,404.54 crs.

The amount of *loans made* by the 130 rural banks at the end of 1912 was 18,133,967.95 crs., as against 15,538,637.46 crs. in 1911, with an in-

crease therefore of about 2,500,000 crs. The total amounts lent by the individual banks varied from a maximum of 899,810.76 crs. to a minimum of 12,366 crs.; the average amount per bank was 139,492.05 crs. As appears from Table IX, the amounts lent in the 19 years since the foundation of the Federation show a constant increase, except in 1908, when there was a decrease of 2,762,103.76 crs. due to the withdrawal of the Polish Banks from the Federation.

At the end of 1912, 30 banks had lent up to 50,000 crs., 34 up to 100,000 crs., 43 up to 200,000 crs., 13 up to 300,000 crs., 4 up to 400,000 crs. and 6 more than 400,000 crs.

TABLE IX. — *Credit Societies: Loans Made.*

Year	Number of Banks	Amounts Lent — Crs.	Increase — Crs.	Average amount per Bank — Crs.
1894	19	579,920.86	—	30,522.00
1895	28	845,718.78	265,797.92	30,204.20
1896	56	1,607,785.10	842,066.32	30,918.92
1897	69	2,250,850.56	643,065.46	32,620.00
1898	99	3,028,183.87	777,333.31	30,281.83
1899	113	3,734,371.11	706,187.24	32,740.00
1900	121	4,510,439.21	776,068.10	37,234.20
1901	123	5,383,429.00	872,989.79	43,067.71
1902	129	7,056,597.50	1,673,168.50	55,129.63
1903	134	8,477,227.55	1,420,630.05	62,332.55
1904	147	9,968,866.21	1,491,638.66	66,905.14
1905	154	11,813,241.95	1,914,375.74	76,709.36
1906	161	12,099,288.08	286,046.13	75,150.85
1907	168	13,346,754.57	1,247,466.49	79,444.96
1908	120	10,584,650.81	*	88,205.42
1909	120	11,654,140.87	1,069,490.06	97,117.84
1910	125	13,199,084.92	1,544,944.05	105,592.67
1911	130	15,538,637.46	2,338,552.54	119,527.95
1912	130	18,133,967.95	2,595,330.49	139,492.05

* Decrease of 2,762,103.76 crs.

In Table No. X the average amount of savings deposits and of loans made per bank are compared.

TABLE X. — *Credit Societies: Average Amount of Savings Deposits and Loans Made per Bank per Year.*

Year	Number of Banks	Average Amount of Savings Deposits per Bank — Crs.	Average Amount of Loans Made per Bank — Crs.	Excess of Deposits over the Loans Made — Crs.
1894	19	34,147.48	30,522.00	3,625.48
1895	28	36,467.78	30,204.20	6,263.58
1896	56	33,890.92	30,918.92	2,972.00
1897	69	34,679.94	32,620.00	2,059.94
1898	99	32,067.34	30,281.83	1,785.51
1899	113	42,666.08	32,740.00	9,926.08
1900	121	47,864.31	37,234.20	10,630.11
1901	123	55,410.67	43,067.71	12.342.96
1902	129	68,935.82	55,129.63	13,806.19
1903	134	68,253.26	62,332.55	25,920.71
1904	147	74,331.29	66,905.14	7,426.15
1905	154	79,730.49	76,709.36	3,021.13
1906	161	87,523.74	75,150.85	12,372.89
1907	168	96,820.17	79,444.96	17,375.21
1908	120	120,919.87	88,205.42	32,714.45
1909	120	131,487.78	97,117.84	34,369.94
1910	125	136,319.07	105,592.67	30,726.40
1911	130	148,663.93	119,527.95	29,035.98
1912	130	155,470.99	139,492.05	15,978.94

Of the 130 banks federated in 1912 only 69 had *current accounts*. The amounts deposited on current account was 801.531.13 crs. The amounts withdrawn were 929.710.23 crs. The withdrawal, therefore, exceeded the deposits made by 127,179.10 crs. In the 19 years of the life of the Federation (up to 1913), the maximum amounts were reached in 1907, with 1,004,862.30 crs. deposited and 1,170,506.33 crs. withdrawn.

As we see from Table No. XI, only in two years have the amounts deposited exceeded those withdrawn: in all the other years, the withdrawals exceeded the deposits in amount.

TABLE XI. — *Credit Societies: Current Accounts.*

Year	Number of Banks		Current Accounts		Excess of	
	Total	With Current Accounts	Deposits — Crs.	Withdrawals — Crs.	Deposits — Crs.	Withdrawals — Crs.
1894	19	7	33,733.31	60,628.36	—	26,895.05
1895	28	8	29,503.68	37,527.24	—	8,023.56
1896	56	23	88,567.39	77,125.28	11,442.11	—
1897	69	29	212,752.75	324,662.44	—	111,909.69
1898	99	37	262,713.18	371,107.17	—	108,393.99
1899	113	40	289,840.19	400,561.39	—	110,721.20
1900	121	43	413,010.63	516,243.20	—	103,232,57
1901	123	51	440,990.96	497,649.17	—	56,658.21
1902	129	54	451,135.51	523,380.96	—	72,245.45
1903	134	59	486,823.58	647,434.25	—	160,610.67
1904	147	65	649,963.67	740,609.34	—	90,645.67
1905	154	72	700,166.19	859,644.50	—	159,478.31
1906	161	74	876,432.85	871,823.67	4,609.18	—
1907	168	80	1,001,862.30	1,170,506.33	—	165,644.03
1908	120	66	980,637.88	1,163,648.50	—	183,010.62
1909	120	63	637,837.30	858,684.05	—	220,846.75
1910	125	58	656,155.49	688,513.16	—	22,357.67
1911	130	68	711,849.38	911,498.57	—	199,649.19
1912	130	69	801.531,13	929,710.23	—	127,179.10

The amount of *Government securities* held by the rural banks was highest in 1907, when it was 331,253.15 crs.; in the succeeding years from 1908 to 1900 there was a decrease of 175,789 crs. But in 1911 we find a considerable increase, and the figure of 304,754.80 crs. was reached; in 1912 there was a decrease of 20,000 crs. from this. The capital invested in public securities means a reduction of the monetary circulation and it is therefore to be hoped that the amount may be reduced to the utmost possible.

Table XII shows the annual fluctuations in this department of the business of the Silesian credit societies.

TABLE XII. — *Credit Societies: Government Securities.*

Year	Number of Banks		Government Securities held	Increase	Decerase
	Total	Holding Government Securities	— Crs.	— Crs.	— Crs.
1894	19	6	51,617.94	—	—
1895	28	6	48,158.92	—	3,459.02
1896	56	9	75,595.70	27,436.78	—
1897	69	6	35,697.56	—	39,898.14
1898	99	7	32,556.76	—	3,140.80
1899	113	12	124,041.44	91,484.68	—
1900	121	9	71,469.97	—	52,571.47
1901	123	13	130,442.62	58,972.65	—
1902	129	14	208,297.45	77,854.83	—
1903	134	12	271,840.00	63,542.55	—
1904	147	13	293,761.20	21,921.20	—
1905	154	14	243,853.50	—	49,807.70
1906	161	13	249,067.80	5,214.30	—
1907	168	14	331,253.15	82,185.35	—
1908	120	17	271,064.80	—	60,188.35
1909	120	17	195,122.43	—	75,942.37
1910	125	13	175,789.00	—	19,333.43
1911	130	12	304,754.80	128,965,80	—
1912	130	11	284,209.40	—	20,545.40

As regards the *profits* and *losses*, from the balance sheets of the 130 federated banks we find that 124 banks closed their accounts for 1912 with a profit of 76,086.02 crs., while 6 had a total loss of 2,392.12 crs. The average profit per bank was therefore, 613.59 crs.

There was a certain increase in the *working expenses* in the last few years but they are almost insignificant in comparison with the total business as will be seen in the following table, where the proportion of the working expenses per cent. of the general business of the banks is given; this shows the disinterestedness of the officers of the Raiffeisen banks, nearly all of whose appointments are honorary.

In Table No. XIII we find statistics of the profits and losses and working expenses of the Silesian rural banks for the period 1894-1912.

TABLE XIII. — *Credit Societies*: *Profits and Losses: Working Expenses.*

Year	Profit and Loss						Working expenses		
	Number of Banks	Number of Banks Closing their accounts with a Profit	Number of Banks Closing their accounts with a Loss	Profit — Crs.	Loss — Crs.	Average Profit per Banks — Crs.	Working Expenses — Crs.	Average per Bank — Crs.	Percentage of Total Business
1894 . .	19	14	5	4,283.17	652.06	305.94	2,819.42	148.39	0.24
1895 . .	28	21	7	4,309.29	575.94	205.20	3,799.65	135.70	0.19
1896 . .	56	36	20	6,154.75	730.94	170.97	10,284.29	183.64	0.62
1897 . .	69	57	12	11,075.86	877.09	194.31	8,515.65	123.41	0.17
1898 . .	99	60	33	14,800.39	3,650.26	246.67	14,104.80	145.60	0.18
1899 . .	113	83	31	18,052.26	2,419.29	217.49	15,888.09	139.36	0.16
1900 . .	121	93	28	25,729.30	2,874.81	276.55	13,570.22	112.15	0.16
1901 . .	123	98	25	30,355.65	2,818.24	309.75	16,655.23	137.64	0.13
1902 . .	129	107	22	36,809.99	3,561.34	344.01	23,738.10	184.01	0.16
1903 . .	134	120	14	45,868.20	2,730.98	382.23	29,337.20	218.93	0.16
1904 . .	147	130	17	40,802.64	2,465.57	313.86	29,045.31	197.58	0.14
1905 . .	154	144	10	49,468.75	816.72	343.53	27,963.64	181.58	0.13
1906 . .	161	144	17	51,911.54	2,069.49	360.49	28,294.42	175.74	0.11
1907 . .	168	155	13	56,363.26	5,136.43	363.63	33,568.72	199.81	0.12
1908 . .	120	113	7	42,641.19	1,106.70	353.78	24,344.40	202.86	0.10
1909 . .	120	113	7	52,189.44	728.57	434.91	31,798.56	264.87	0.14
1910 . .	125	115	10	54,078.44	2,189.81	432.62	21.650.15	173.20	0.11
1911 .	130	123	7	67,009.71	440.70	545.60	36,985.92	284.50	0.16
1912 . .	130	124	6	76,086.02	2,392.12	613.59	44,606.78	343.12	0.13

An indication of the prosperity of the Silesian rural loan and savings banks is the excellent situation of their *reserve funds*. Of the 130 banks, 123 had at the end of 1912 reserve funds to the amount of 448,643.46 crs. giving an average of 3,647.50 crs., per society. There has been a constant yearly increase ; in 1912 there was a total increase of 52.807.54 crs., equal to an average increase per bank of 312.75 crs. The total business of the federated credit societies showed in the last two years of the period 1894-1912 a considerable increase; in 1912 it reached a maximum, while there had been a by no means inconsiderable decrease from 1908 to 1910.

Table No. XIV shows the amounts of the reserve funds and the general business done by the federated banks.

TABLE XIV. — *Credit Societies*: *Reserve Funds*: *Total Business Done.*

Year	Number of Banks	Reserve Funds			Total Business Done		
		Number of Banks with Reserve Funds	Reserve Funds — Crs.	Average per Bank — Crs.	Total Business Done — Crs.	Increase — Crs.	Percentage
1894	19	10	7,229.36	722.93	1,333,425.58	—	—
1895	28	15	10,942.93	729.48	1,974,533.53	841,107.95	6
1896	56	34	16,647.09	489.58	3,850,588.52	1,876,054.99	98
1897	69	46	24,495.39	520.00	5,523,908.54	1,673,320.02	44
1898	99	60	36,480.12	610.00	7,852,253.56	2,328,345.02	46
1899	113	75	45,861.00	611.48	9,445,988.60	1,596,315.60	23
1900	121	89	59,501.44	668.55	11,094,230.67	1,645,661.51	18
1901	123	96	82,778.12	862.37	12,082,530.81	988.300.14	9
1902	129	106	123,881.53	864.69	14,514,382.49	2,431,851.68	17
1903	134	118	142,192.81	1,049.21	17,697.697.87	3,183,315.38	18
1904	147	130	184,706.50	1.240.30	20,112,116.31	2,414,418.44	12
1905	154	137	218,402.61	1,594.17	20,983,485.62	871,369.30	4
1906	161	144	254,303.71	1,765.99	24,386,008.56	3,402,522.95	14
1907	168	152	297,748.95	1,958.87	27,636,621.25	3,250,612.69	12
1908	120	112	279,664.72	2,497.00	22,611,559.24	—	—
1909	120	112	308,215.57	2,751.92	21,886,836.57	—	—
1910	125	114	362,153.04	3,176.78	19,094,794.70	—	—
1911	130	119	395,835.92	3,334.75	28.808,650.02	8,713,855.32	31
1912	130	123	448,643.46	3,647.50	34,079,546.60	5,270,896.58	15

Let us close our account of agricultural co-operative credit in Silesia with a table giving figures referring to the banks' *own capital* (*eigenes Kapital*) and the *capital of third parties* (*fremdes Kapital*) administered by the federated banks. A knowledge of these particulars is necessary in order to judge of the situation of the societies. Naturally the amounts both of the banks' own capital and of that of third parties administered by the banks increases from year to year, but the same proportion has been always mantained.

TABLE XV. — *Credit Societies: Own Capital and Administered Capital.*

Year	Number of Banks	Own Capital (Eigenes Kapital) — Crs.	Administered Capital (Fremdes Kapital) — Crs.	Proportion per cent. of Own Capital to Administered Capital
1894	19	29,763.98	665,783.92	4.50
1895	28	45,515.47	1,050.731.82	4.55
1896	56	79,655.93	1,903,288.75	4.19
1897	69	111,076.83	2,664,281.30	4.28
1898	99	149,727.80	3,637,252.47	4 15
1899	113	194,321.38	5,227,017.44	3.73
1900	121	228,823.36	6,389,388.99	3.63
1901	123	267,056.97	7,465,128.66	3.60
1902	129	323,462.58	10,126,490.11	3.23
1903	134	364,108.05	10,364,314.81	3.64
1904	147	430,196.59	12,335,259.71	3.58
1905	154	485,144.33	13,895,841 79	3.72
1906	161	523,288.42	15,904,794.83	3.48
1907	168	585,904.72	17,244,159.44	3.44
1908	120	501,359.58	15,140,027.52	3.34
1909	120	534,687.14	16.659,616.48	3.34
1910	125	601,426.99	17,901,521.64	3.36
1911	130	657,969.39	21,321.803.59	3.13
1912	130	744,687.93	22,726,479.24	3.38

BRITISH INDIA.

REPORT OF THE COMMITTEE ON CO-OPERATION IN INDIA.

Under a Government of India Resolution dated October 8th, 1914, a Committee, consisting of a President (Sir E. D. Maclagan, K. C. I. E.) and six members was appointed to enquire into and report upon the co-operative movement, "especially in its higher stages and in its financial aspect." Two of the members were Indian gentlemen experienced in business and finance, one of the four English members was a well-known banker and three were Government officers. Mr. R. B. Ewbank, Registrar of Co-operative Societies, Bombay Presidency, acted as Secretary.

The Committee met on the 6th November, 1914, and travelled for four months visiting various centres in the larger provinces of India, examining in that time 93 witnesses and inspecting 153 societies of various kinds, besides interviewing the managers and agents of several joint stock banks. Their Report which, it will be noted, has been published with commendable promptitude, deals in succession with — I. The Co-operative Movement in India (an historical and general sketch), II. Primary Societies, III. Central Banks, IV. Provincial Banks, and V. Public Aid. These five chapters are followed by a Summary of the findings of the Committee and by a number of Appendices. The main Report is prefaced by an "Abstract Report" in which the chief points which have occupied the attention of the Committee are passed in review and the conclusions arrived at in each case are briefly stated. This Abstract Report is such an excellent critical study of the co-operative movement in India and is so clearly entitled to be considered authoritative that we feel we cannot do better than present it as it stands. We intend to deal in detail with some at least of the chapters of the full Report in subsequent issues. Meanwhile, we print below the Abstract Report.

ABSTRACT REPORT.

§ 1. Object of abstract report.

In order to facilitate an appreciation of our views by persons to whom our Report may appear too detailed and technical, we have deemed it convenient to prepare an abstract dealing only with those points which

are of larger importance. For this reason we do not propose to enter into great detail and our remarks in this abstract must be held to be supplemented by what we have said in our main Report. For the same reason we shall refer to agricultural credit societies only among primary societies, as societies of this nature form 13,715 out of the 14,566 primary societies which have come into existence since co-operation first obtained a footing in India in 1904.

§ 2. The primary society.

A primary agricultural co-operative credit society is formed in its first stage by a number of individuals, not less than ten, who, because they are unable individually to obtain the credit which is necessary for their small agricultural operations either in adequate quantity or at rates or on terms of honest dealing which enable them to work at a profit, combine together to obtain this necessary credit on reasonable conditions. To effect this each becomes liable for the debts of the society to the extent of the whole of his assets. If in this combination there is a number of well-to-do persons who have joined, not to obtain credit facilities they already possess, but to assist their poorer friends, it is obvious that the addition they bring to the total of the assets of the individual members provides a substantial security to a creditor for any money lent to the society and used by the poorer members. If, on the other hand, all the members are of the same class, too poor individually to be trusted with any loan at a rate of interest which does not include a very large proportion of insurance to guard against the risk of non-repayment, it is equally obvious that the risk on the loans is in no way diminished from a purely material point of view by the combination. It will not, we think, be found frequent in practice in India for men of substantial position to join a society to support the credit of their poorer neighbours, and consequently it may be taken that the majority of societies belong to the latter class. It is true that even in that case the total assets of the members may, and generally do in practice, total up to a nominal saleable value, based on the rates obtained at occasional sales, considerably in excess of the total loans granted. It is, however, probable that in the event of the forced sale of a number or all of these assets, the amount realised would be found to be very much less than that at which they had been valued and might in many cases fail to cover the debts of the societies, the more especially if many such sales were taking place simultaneously within a small area. Hence it is clear that the creditors' real security consists not in the material assets of the members but in the ability and desire of the members to put the borrowed money to productive uses and to repay the loan out of the profits made thereby.

Each loan should mean so much earning capacity, so much producing power for the individual borrower. The guarantee consists in the expectation that each member of the society knowing that he stands to lose his

all by the default of the others, will exert moral pressure on his co-members to ensure that they use for a proper productive purpose the money which they have borrowed and duly repay it at the appointed time. The security in fact lies in the use of each loan for genuine productive purposes, the honesty and thrift of the members, the watchfulness they exercise over each other, the moral influence which they bring to bear upon dishonest or unthrifty co-members and the feeling of solidarity which is usually awakened by association for a common purpose. These represent the essential elements of co-operation in its perfected form and it is in the presence of these elements that the business aspect of co-operation also finds its best security. The societies, as we have said in our Report, must in the first place be *co-operative* and must further be *business-like*. The two qualifications are largely inter-dependent, but for the sake of clearness it will be convenient to deal with them separately as far as possible.

§ 3. Conditions necessary to make a society co-operative.

The society to be fully *co-operative* must fulfil many conditions. The theory underlying co-operation is that weak individuals are enabled to improve their individual productive capacity and consequently their material and moral position, by combining among themselves and bringing into this combination a moral effort and a progressively developing realisation of moral obligation. The movement is essentially a moral one and it is individualistic rather than socialistic. It provides as a substitute for material assets honesty and a sense of moral obligation, and keeps in view the moral rather than the material sanction. Hence the first condition obviously is that every member should have a knowledge of the principles of co-operation, if this co-operation is to be real and not a sham. In the formation of a society the first essential is the careful selection as members of honest men, or at any rate of men who have given satisfactory guarantees of their intention to lead an honest life in future. As regards the dealings of the society, it should lend to its members only, and the loans must in no circumstances be for speculative purposes, which, so far from encouraging thrift and honesty, have exactly the opposite effect. Loans should be given only for productive purposes or for necessaries which, as essentials of daily life, can fairly be classed as productive. The borrowers should be required to satisfy their fellows that they are in a position to repay the loans from the income that they will derive from their increased productive capacity, or that by the exercise of thrift they can effect a margin of income over expenditure which will suffice to meet the instalments of their loans as they fall due. When a loan has been given, it is essential that the committee of the society and the other members should exercise a vigilant watch that the money is expended on the purpose for which the loan was granted. If it is improperly applied, it should be at once recalled. It is further advisable to add to the general supervision

of the society the special supervision of individual members, by taking personal sureties in the case of each loan. In the event of any default by the borrower an instant demand should be made on these sureties. In the more general matters of the society's business there should, of course, be a committee of management with a president and a secretary, all of whom, execept those who perform purely clerical duties and have no voice in the management, should be members of the society and give their services to it gratuitously. At the same time the ultimate authority should never be delegated to the office bearers, but should be retained in the hands of the members, who must continue to take a practical interest in the business of the society. With this object the constitution should be purely republican ; each member should have one vote and no more in the general meeting and all business should be transacted with the maximum of publicity within the society. For example there should be kept in some place open to the inspection of every member a list showing the loans issued to every member, the names of his sureties and the amount of the loan still unpaid, and each member should be required to know generally how this account stands: general meetings should be frequently held at which the accounts and affairs of the society are fully discussed and explained. The express object of the society should be the development of thrift among its members, with the hope too that this idea of thrift will spread in the neighourhood. To effect this object loans must be given only when they are really necessary and desirable. Further the development of thrift and of a proprietory interest in the society should be aided by efforts to build up as soon as possible a strong reserve fund from profits. The society must also be encouraged to obtain as much as possible of its capital from the savings which its teaching and example have brought about among its members and their neighbours. With all these must go the elementary business principles of honesty, punctuality, proper accounts, diligence and payment when due. To ensure all this there must be adequate control from within, increasing vigilance and supervision by the office bearers, and a continuous effort by members in learning the principles of co-operation, in meeting frequently, in watching others, in working hard and observing thrift, and in punctual repayment of their own loans as they fall due.

§ 4. Three special points.

There are three matters in this connection which we consider to be of special importance : — (*i*) the starting of new societies and the size of societies, (*ii*) the period for which loans are granted to members, and (*iii*) the rate of interest charged on loans.

(i) *New Societies and their size.*

With reference to the starting of new societies we have recommended that the utmost care should be exercised in permitting the formation of a society and that the Registrar should only consent to register a society after he is convinced that its prospective members understand co-operative principles and duties and are prepared to act up to them and that there is a reasonable probability that they will do so. Any general spirit of official propagandism of primary societies would in our opinion now be a grave mistake. The movement has spread sufficiently to enable the villagers in most provinces to have an opportunity of seeing a society in being and to take steps to form a society of their own, should they consider that the inducements are sufficient. The members should be sufficiently acquainted with each other to know whom to trust and whom not to trust and to be able to exercise genuine supervision over each other's dealings. Consequently large societies are to be deprecated. Undoubtedly large societies do exist and prosper up to a point, but it will be found in practice that these depend for their existence on the efforts of the president or a small committee, and that the ordinary member takes little interest and has practically no voice in the management or affairs of his society. The co-operative safeguards are therefore absent, and everything depends upon the honesty and business qualities of the committee. We have noticed moreover that it is from societies of this nature that the majority of complaints have come that members who are perfectly well able to repay are contumaciously refusing to do so. This is only to be expected when there is an absence of the co-operative elements of mutual watchfulness and supervision and of the exercise of moral pressure. It is impossible to avoid the conclusion that large societies of this nature must inevitably lose their co-operative character and degenerate into village money lending concerns.

(ii) *Length of loans and their repayment.*

The fixation of the period of loans is a point which deserves special consideration. To take a common instance, a man, who has mortgaged his land and is working as a daily labourer, applies for a loan of (say) Rs. 400 to redeem that land and his fellow members come to the conclusion that, put in the possession of the land, he can by the exercise of due thrift save Rs. 150 a year. If a loan of Rs. 400 is granted on condition of repayment by two instalments within two years, the result must be to drive the borrower again into debt by forcing him to raise elsewhere the balance required to meet these instalments when they fall due. If instalments have been fixed to which there is admittedly no intention of

adhering, the arrangements of the society for repaying its own borrowings must necessarily be stultified, while other borrowing members who may very well be in a position to pay, are encouraged to resort to procrastination and evasion. On the other hand a well-to-do man, though he might reasonably be granted a loan to replace plough cattle which had died, would probably be in a position to repay that loan sooner than another man whose income and necessary expenditure afforded a smaller margin. Conversely, by allowing three years for the repayment of a loan granted for seed grain, which should properly be repaid after the harvest, direct inducements to extravagance and unthriftiness are placed in the way of the borrower. It is, therefore, necessary that each society before granting its loans should consider carefully the time within which, having regard to the purpose of the loan and the circumstances of the borrower actual repayment can be properly expected. When the period has been fixed, it should be rigorously enforced except in the event of harvest or domestic calamities. The system of extending loans as a matter of routine is one of the greatest dangers that exists in the co-operative movement, in that it paves an easy way for procrastination and eventual default. It is moreover facilitated by the fact that, if a loan is formally extended by the society, even for the sole reason that the borrower refuses to pay, it does not appear in the returns as an overdue loan. It is consequently possible for the nominal assets to include loans which should really have been written off long before as bad debts. It is difficult to devise any system of returns which would differentiate extensions, and the fact of improper extensions having been given can best be elicited by a careful inspection of the society. When the practice comes to light prompt action must be taken, but the real remedy lies in the prevention of the growth of the practice by the society's seeing that no loans are granted on conditions of repayment within a period, inside which no reasonable person could expect the borrower to repay. In this connection attention should be paid to the fact that agricultural finance must be based on the agricultural cycle, and this cycle, though usually of the duration of one year, may occasionally be a matter of months, but is frequently a matter of from two to five years. Where climatic conditions are such that in a one-crop area failure of the harvest is practically unknown, agricultural finance is of course based on repayments at harvest within the twelve months. Where however the climatic or other factors render harvests precarious, the agricultural class must be financed with regard to a period of years which will cover the average cycle comprising good, bad, and indifferent seasons. Thus in an area, where one good, one bad, and two indifferent years form the ordinary cycle of seasons, the agency financing the cultivator does so on the assumption that the loans will be repaid in full after the first good harvest, which may of course not occur until the fourth year. This has been from time immemorial the primary practice of the money lender, and it seems advisable to enter this caveat, as there is a tendency to imagine that agricultural finance is always worked on a twelve months' basis.

(*iii*) *Rate of interest on loans.*

As regards the interest at which loans are granted to the members of societies it has sometimes been urged that in order to stimulate the movement and give its full benefits to members of society, the rates of interest should be made as low as possible. This point of view ignores the dangers of unthriftiness and extravagance incidental to too facile credit. It is sound policy for a society to start by lending to members at rates which are still substantial, though very much lower than those at which, with their precarious credit, they could borrow from the local money lender. Such rates we have found in many places to as much as 36, 48 or 60 per cent per annum, and in these places a society may very well begin by charging 15 or 18 per cent. We have, on the other hand, been told in some places that ample money can be borrowed there from local money lenders at 8 or 9 per cent per annum or even lower rates. We cannot however help thinking that money at this rate is available only for those who have ample realisable material assets to offer as security, and not for those agriculturists whose emancipation from their present depressed condition is the object and justification of Government's expenditure on co-operation. In the charge of a high rate of interest on loans to them there is no hardship imposed on members, inasmuch as every penny of profit made on that rate is retained for their use and benefit in the shape of a reserve fund, which can be later employed to enable loans to be made at very much reduced rates, when a substantial reserve has been accumulated and the members have thoroughly learnt the use and value of money. The matter is one which we think should be under the very careful supervision of the Registrar who should have full powers as regards controlling the rates at which money is lent to members.

§ 5. Business aspect. Sources of capital.

Turning to the more purely *business* aspect position of primary societies, we may note that they rely for their funds partly on external and partly on internal sources. In the former may be included deposits from members and non-members and loans from central financing institutions. In the latter the reserve fund and (in some Provinces) the share capital.

(*i*) *External Capital. Deposits.*

The amount of capital hitherto obtained in the way of deposits has on the whole been disappointing. As long as the deposits received are of a truly local character and are made from confidence in the working of the

society, every effort should be made to secure them, both from members and from non-members. We look to a considerable increase in deposits as an esential to real progress in the future.

Loans to societies — how determined. Use of Unions. — For the present, however, the main source of outside capital in primary societies consists not in deposits but in loans from central co-operative financing agencies, to which we shall allude further below. To such agencies applications by primary societies for loans are generally made, and such an agency on receiving a request for a loan has to consider its treatment. In some cases the request is received through the office of the Registrar who has already, after receiving the reports of his subordinates, satisfied himself as to whether the loan may safely be given and has endorsed his sanction for that amount on the application. In some cases the orders on the loan are passed by the central financing institution itself. In such cases it must arrive at a decision based upon the reports of the staff which it keeps for that purpose or on the opinion of members of its directorate with local knowledge. In other cases, but not generally, a society before obtaining a loan has to be admitted to membership of a Union. Such a Union is a body of which the only members are the primary societies within a circle of a radius averaging generally about 8 miles and at the deliberations of which each member of the society has a number of votes proportionate to the number of its own members. The duties of the Union are to advise on the grant of loans to its constituent societies and to supervise the working of these societies. Being composed of societies all drawn from the same limited area who are or should be also shareholders in the central financing institution, a body of this kind may safely be presumed to have a fairly intimate knoweledge of the affairs of its constituent societies and of their individual members, and is therefore in a position to give a most useful opinion as to the propriety of any loan asked for by a society, and is also in a position to supervise the use of the money borrowed and the general working of the society, while its member societies' interests in the central financing institution should ensure a due regard for the latter's welfare by the refusal to recommend any loan regarding which there was any doubt. It is moreover customary to introduce a further element of caution into a Union's recommendations and to give each member society a direct interest in keeping other societies up to the mark by making it liable to a certain limited extent to make good to the central financing institution any loss which such institution may have incurred from the default of a society to repay a loan recommended by the Union. In a province in which a Union system obtains any application for a loan by a society must first be submitted to the Union which will bring to bear upon it a scrutiny, based upon personal knowledge and sharpened by financial responsibility, as to the necessity and productiveness of the loan, the character and position of the members of the society, if new, its past history and behaviour, if of some year's standing. If the result of this scrutiny is unsatisfactory, the loan is not recommended or a loan is recommended of very much diminished amount.

The central financing institution, provided it has funds available with due regard to the claim of other Unions, would in general rarely refuse to make a loan to the full extent recommended by a Union.

Repayments of loans made to societies. — The loan, when sanctioned, is issued to the society under conditions varying in different provinces as to repayment of principal and payment of interest. In most cases the interest has to be paid regularly each year or half year, but the practice differs widely as to repayment of principal. In some cases it is repayable by instalments spread over periods varying from one to ten years: in others it is repayable in one lump sum after a term of years. It would probably be safe to say that on an average most loans from central financing institutions to societies are repaid within three to four years, whether by yearly instalments or in one sum, and that the usual rate of interest charged to the primary society is 7 to 9 per cent per annum. It is usually left to the society after it has received the loan, to distribute it among its members in such proportions and on such terms as regards the period of repayment by them as it thinks fit ; and it is expected that the central financing institutions should recover repayments from the society corresponding to the repayments made to the society itself by the members.

We have heard it urged on several occasions that the real test of efficiency in a society is punctual repayment and that if a society is making repayment punctually it may safely be presumed to be in a satisfactory state. It is certainly true that a good society will always be punctual in its repayments, but the converse proposition cannot be admitted. To begin with, a society may be making repayments to the central financing institution from deposits entrusted to it from time to time and may be making no recoveries at all from its members. Or again its members may be misapplying or squandering their loans, while repaying punctually to the society with money temporarily provided by a friend or money lender whom they recoup from the balance of a fresh loan, obtained from the society for some ostensibly productive object. As a consequence a society which is negligent in supervision over its members may be receiving regular payments from them and repaying regularly to the central financing institution, while its members may be sinking further into debt to the extent of money which they have borrowed and wasted. This state of affairs can only be ascertained by a close examination of the society's books, coupled with a careful enquiry on the spot as to the affairs of each member and the manner in which he has utilised his loans. In the supervision of a society the greatest care should be taken to see that the repayments are genuine, and there is grave danger in placing undue reliance on the mere statement of a society's repayments to the central financing institution.

Assessment of credit. —It is part of the business of the Central Financing Institution to see that the credit of the society should be duly assesssed, that is to say that the total external borrowings of a society whether as deposits or as loans should be fixed annually at a certain sum. Without a system-

atic arrangement of this kind no proper relation can be maintained between the creditworthiness of the societies and the liabilities they incur, and we consider the point of such importance that, for the present at least we regard it as essential that the Registrar should maintain a control over the total amount that a society may borrow from every source, and that a maximum limit should be fixed for such borrowings, to be varied from time to time as the society shows its growing strength or the reverse. When the limits for borrowing have then been fixed any deposits which would cause a society's borrowings to be in excess of that limit would have to be refused. Deposits within that maximum should only be taken on condition that the society itself retained sufficient liquid assets to meet the claims of depositors or, as is more suitable, made an arrangement for the necessary cover with a central financing institution. The maximum borrowing limit would, as above noted, include borrowings from a central financing institution as well as from outside depositors and members, while loans from one society direct to another should be precluded altogether. If a society's temporary requirements are substantially less than the borrowing limit assigned to it and happen to leave it with surplus funds, it should place these with the central financing institution.

(*ii*) *Owned capital. Shares and surplus assets.*

The internal sources of capital in societies are, as above stated, the share capital and the reserve. The bulk of the societies, at present, have little or no share capital, and shares constitute a substantial part of the capital in four Provinces only. It is hard to expect poor peasants to subscribe anything large in the way of share capital, but when this can be obtained, as it usually is, in instalments, it forms an excellent means both of inculcating thrift and of providing a form of capital owned by the society. For the bulk of the 'owned' capital however, the society must look to its reserve fund, that is to the surplus assets which it accumulates from its annual profits. The amount of these surplus assets depends mainly on the difference between the rate at which the society borrows and that at which it lends, and until the amount has reached a substantial figure it is a mistake to reduce unnecessarily the rates at which money is lent to members. If arrangements are made for maintaining a resource available for meeting deposits, the surplus assets of a society can most suitably be employed in the business of the society.

§ 6. AUDIT AND SUPERVISION OF SOCIETIES.

It will be seen that in order to be fully co-operative and thoroughly business-like, a society must live up to a high standard. Considering the class of people who compose the bulk of the agricultural societies it is useless to expect the maintenance of such a standard without frequent audit and unceasing supervision from without. It is difficult to exaggerate the importance of such audit and supervision. Without them a good

society may soon degenerate and a bad society may soon come to ruin. The work of audit and supervision should in the first instance be vested in the the higher co-operative institutions, Unions and Central Banks, but the ultimate responsibility for these duties must rest with the Government as represented by the Registrar. There is indeed no reason in our opinion why the whole of such supervision and audit should fall on the Government staff and be met at Government expense. A full audit by a Government staff on the accounts of each society is essential, but this might take place once in two or three years, the audit in the meanwhile being conducted either by the Unions, where these exist, or by the central financing institutions. Constant supervision is part of the the duty of a Union, and where there is no Union it should be incumbent on the central financing institutions to carry out the duties of supervision, and to maintain an efficient staff for the purpose. The cost of this can fairly be met by the societies either by a direct contribution or by the central financing institution's charging on loans to them a rate of interest which will cover the expenditure. At the same time we hold that the Registrar cannot abrogate his responsibility in the matter of directing and supervising this co-operative audit and supervision, and that he must see that the influence of central financing institutions is not misdirected or applied in wrong, improper or mischievous ways, and must maintain an efficient direction and control to ensure that the movement is kept on co-operative lines and is confined to these lines. The exercise of due care before formation and the ensuring of full and proper supervision after formation we consider indeed the most important part of the Registrar's duty. If the Primary Societies are sound and solvent, the whole provincial edifice must be sound unless there is instability in the higher finance. If the Primary Societies are unsound, if they are based on mere money lending and not on co-operative principles, no matter how sound the higher finance may apparently be, its assets will be locked up in indifferent or bad securities and sooner or later serious trouble, if not failure, is bound to result.

The figures below show the rate of growth of primary societies of all kinds in the last eight years : —

Growth of Primary Societies 1906-7 *to* 1913-14.

Years	No. of Societies	No. of Members	Working capital
			Rs.
1906–07	832	88,582	—
1907–08	1,350	148,698	41,75,211
1908–09	1,984	179,144	72,25,119
1909–10	3,397	220,676	1,01,29,232
1910–11	5,262	299,376	1,53,31,702
1911–12	8,057	391,957	2,35,88,358
1912–13	11,548	513,851	3,33,01,603
1913–14	14,566	661,859	4,64,27,842

§ 7. Need of increased control.

No one reading these figures can fail to be struck by the magnitude which the growth has already attained or to be convinced that the movement has taken firm root. Societies are now so spread over all parts of India and the advantages which their members are obtaining are so patent, that it is impossible to doubt that the movement will eventually attain dimensions compared to which its present size will appear negligible. As a consequence there will undoubtedly arise through the medium of co-operation a powerful organisation formed of these agricultural classes who are at present inarticulate through want of education and cohesion. The potentialities of such an organisition, its advantages and dangers, and the possibility of its perversion to wrong ends, if it is allowed to develop without adequate supervision and proper control, must be apparent to all. Further there will be in use in these societies a very large sum of money amounting to many millions of pounds, mainly the property of thrifty agriculturists, tradesmen and men of the professional classes on whom the loss of this money would inflict an irreparable blow coupled with far-reaching consequences. This money will be lent to individuals of whom many do not own the material assets to provide the requisite security, and to sell up whom on any large scale would necessarily involve serious consequences. It must be obvious then that, if loans are not applied to productive or necessary objects and repaid promptly from the profits so earned, if there is not in each member the desire and intention so to use his loans and so to repay them and to see that each of his fellow members does likewise, there is a grave danger of the creation of a gigantic credit fabric which, having no real soundness within, may eventually collapse. On the other hand, with a sound co-operative system carefully restricted to its legitimate objects, there are innumerable potentialities for increase of wealth and prosperity to the country from a peasantry freed from the crushing load of debt, obtaining on reasonable terms the money which it requires from time to time for its agricultural operations, and using for these operations improved and more scientific methods.

We do not wish to pose either as alarmists or Utopians, but we think that the importance of the movement, its potentialities for good or evil, should be recognised to the full. Of the first danger, — perversion of the co-operative movement to other objects, — we have as yet seen little or no sign, but we think that this possibility should always be borne in mind and carefully guarded against. The second danger, the lack of a true spirit of co-operation, is at the present moment much the more real. We regret to have to say that the conclusion has been forced upon us that in the majority of cases primary societies in India fall short of the co-operative ideal. Speaking generally, even allowing for the backward-

ness of the population, there has been found a lack of true co-operation. The necessity for developing a truly co-operative system rather than cheap money lending and the danger involved in inviting deposits from the public for pseudo-co-operative institutions are matters that have been to a serious extent overlooked. Rapid extension has resulted in the growth of primary societies to an extent with which the Registrar and his staff were unable to cope, and faults have grown up which were inseparable from due lack of care in formation and inadequate means of supervision. At the same time these faults are by no means ineradicable, the societies are young and composed in the main of good material, and with proper care and supervision are capable of being placed on the right lines.

The remedy in both cases lies in the supervision and control of the primary societies by a registering staff adequate and efficient, especially in its higher branches. We do not mean by this that the Registrar should assume the detailed direction of societies. These must be left, as hitherto, to manage their own affairs, but the Registrar must be in a position to know how they are managing these affairs, and to take action in case of need. In addition to being able to acquaint himself with the working of the societies under his charge, the Registrar must be able to give and supervise that teaching of co-operative principles without which proper co-operation cannot be expected to grow. For this work the present staff of Registrars is quite inadequate and we trust that a realisation of the importance of the subject will lead to a material increase in the superior registering staff. Our proposals on the subject are given in detail in the main report and are briefly that, in all the major provinces, there should be in addition to the Registrar at least one Joint Registrar holding a status equivalent to that of Collector, and that in provinces where the number of societies is large there should be approximately one superior controlling officer for each thousand societies. The effect of this would be to add three superior whole time officers to the registering staff of the Punjab, two to that of the United Provinces and the Central Provinces and one to each of the other provinces. It is essential that the officers should be picked men with special qualifications for the work, that their remuneration should be consonant with the arduous nature of their duties and that it should be recognised that the work of Registrar is in the importance of its nature and the experience which it affords equivalent to the work of a Collector and renders an officer equally fitted for executive promotion.

It is also important that the district officer, while not allying himself with the movement in any official capacity and not exercising any of the formal powers of a Registrar, — duties for which he might have no inclination and which the press of other work might force him to allow to fall into routine, — should nevertheless realise the importance of co-operation and its possible effect for good or evil on the district under his charge, and should keep himself thoroughly in touch with the progress of the movement in his district.

§ 8. Central and provincial banks.

As regard the higher financing institutions, it may be mentioned that in Burma, where conditions are somewhat exceptional and there is a fully organised Union system, the primary societies receive loans direct from one bank at Mandalay, except in two districts where owing to difficulties of communication local banks have been formed. These banks however are supported by the Mandalay Bank, which is also responsible for seeing to their affairs being kept in proper condition, and for co-ordinating and controlling the whole co-operative finance of the province. In all other Provinces except Madras and Bombay a system exists under which the provision of funds to primary societies is done by a number of local central financing institutions the business of which covers an area sometimes conterminous with a district, sometimes with a subdivision and sometimes even smaller. Each of these institutions is an independent society registered under the Co-operative Societies Act with limited liability. In Bihar and the Central Provinces these institutions are formally federated under an apex bank, known an as the Provincial Bank, which provides a certain amount of the capital of its constituent banks, balances their excesses and deficiencies and maintains a general control. In Madras and Bombay the large banks at headquarters, while confining their business mainly to lending to primary societies throughout the whole or part of the province, have of late tended to assume certain of the functions of apex banks by lending to and receiving surplus funds from some of the local central financing institutions. Their position however as regards the latter has not been defined; they exercise no control and do not occupy a recognised position as the apex of the provincial co-operative finance. In the remaining Provinces no apex organisation of any kind at present exists and the financial edifice consists of a number of independent local financing institutions without any co-ordination.

The local financing institutions throughout India, of which there are nearly 200, are in the various provinces designated by various names, but to avoid any inconvenience of nomenclature we have in this report applied the single term "Central Bank" to all local financing institutions concerned solely in the direct financing of primary societies, within an area sufficiently limited to allow them to exercise also the duties of supervision and control over these societies. Under this head will come all the central financing institutions except the five mentioned below. The term Provincial Bank will be applied to the apex institutions in each Province which are formally constituted to co-ordinate and control the finances of Central Banks and deal only with such banks and not with primary societies. To this class belong the Provincial Banks of Bihar and the Central Provinces. This leaves in doubt the position of the Central Banks of Mandalay, Madras, and Bombay. In Burma where the system, as explained above, is special, the Bank of Mandalay can appropriately be recognised as a

Provincial Bank. The Banks of Madras and Bombay do business over too large an area to enable them to discharge the functions assigned to Central Banks, while they have not yet been placed in a position to enable them to take up the position of apex banks. It will be more convenient to deal with all classes of financing institutions together, merely predicating that the remarks in paragraph 9 immediately below are not intended to apply to the five above-named banks.

The composition and method of investment of the capital of all these institutions was on the 1st January 1915 as follows, the figures being given in lakhs of rupees. 189.43 was held on deposit from individuals, of which 8.01 was on current account and 4.66 for short terms of less than three months. 103.70 was for periods between three months and one year, and the balance of 73.06 was for periods exceeding one year or on one year's notice. Debentures were 6.37, and loans from Government 3.73. Loans and deposits from other co-operative societies were 46.54 of which 2.28 were on savings bank account. Loans from presidency and joint stock banks amounted to 20.99. Share capital and reserve fund totalled 47.07. Against these liabilities 11.04 was held in actual cash and 10.16 in outside securities of which however a small portion had been pledged to the banks. The remainder of the assets was invested in loans to primary societies and other central institutions and of this one-third to one-fourth might normally be expected to be repaid each year. A small amount of this is however still owed by individuals who had the right of borrowing from some of these institutions. There are further available undrawn amounts of cash credits given by Presidency and Joint Stock banks amounting to 20.27. On the other hand the 20.32 already advanced by these banks has been given on terms which practically all admit of repayment being demanded within the year.

Of their profits these banks are by law compelled to put one-quarter to their reserve fund, and the amount of dividend which they may pay to their shareholders is limited. Some banks keep accounts both for their shareholders and for outsiders and a few still lend money to individual shareholders as well as to societies. It may be generally said, however, that the banks confine their business to receiving deposits from the public, generally for fixed periods, and to lending the money so obtained to primary societies and in a smaller degree to Central Banks.

§ 9. Central banks: their powers and constitution.

As regard Central Banks proper doing business generally in an area not exceeding that of a district, we think that often they have been allowed too little discretion in the matter of making loans to societies and that full use has often not been made of this important link in the co-operative chain for the purpose of supervision and audit of societies. For the latter work the most suitable machinery is undoubtedly the

Union system, but we fully realise the strength of the objection raised in many provinces that it may be some time before a sufficient spirit of autonomy is developed among the members of societies to enable that system to be introduced. In the absence of such a system the entire supervision of the primary societies within its area must be undertaken by the Central Bank, subject to the advice, general supervision and control of the Registrar. This duty a Central Bank is in every way fitted to fulfil, provided its directorate has been suitably selected. It is also necessary that the Central Bank should be in position to enforce its authority against errant societies by the refusal or curtailment of loans. We have found that in many cases it has been the custom for an application by a society for a loan to be adjudicated on by the Registrar or one of his staff, and for the work of the Central Bank to be limited to paying over the amount of the loan sanctioned, if it had in hand the money to do this. This procedure seems to be entirely wrong. The money is the property of the Central Bank which is responsible for it to its depositors and shareholders, and as it has the responsibility in the matter, so it should have the discretion. We have already expressed the view that the Registrar should impose a limit beyond which a society should not borrow, but we think that within this limit the Central Bank should have full power to deal which all applications by societies for loans, and that with this should be coupled the duty of supervising the societies to which it makes these loans. It is however necessary that the constitution and directorate of the bank should be such as to enable it to discharge these functions to the best interest of co-operation. If a bank is frankly a profit seeking capitalistic concern, its interests are in few respects coincident with the interests of societies which it is likely to regard mainly as a means of profit and in the real welfare of which it has little concern. A bank of this nature is further less susceptible to control. To banks where the management is provided entirely from the members of the constituent societies the main objection is that thy are likely to fail to enlist the assistance of the commercial middle classes, who alone are at all capable of conducting a bank of any dimensions and on whose assistance and co-operation the financial support of other members of their class depends. If this difficulty could be got over, there can be no question that banks of this class are the most advantageous and economical, since there is no necessity for them to do more than pay working expenses. Moreover it is in the interests of co-operation that this link in the co-operative chain should be composed of societies themselves and not of outsiders. Consequently it is to be hoped that at some future date the agriculturist will have developed the indigenous ability to provide for Central Banks an efficient management which will command the confidence of the depositing classes, and in some places there are already signs that, given the opportunity, men with the necessary qualifications will be forthcoming. This ideal must however require many years for realisation and we think that at present the best constitution is undoubtedly to be found in banks where the directorate is drawn partly from men of the commercial and professional middle classes and partly from the leading members of

societies, each director representing his own class of shareholders and providing the elements in which the other class is lacking. Care should however be taken to see that the ultimate control of the bank rests with the society shareholders, since this prevents any possibility of exploitation of societies. It should also be made clear that the ideal aimed at is the eventual transition of the bank to a co-operative constitution when the only shareholders will be societies.

§ 10. Need for adequate fluid resource.

Whatever be their constitution the same principles must apply to all higher financing institutions as regards sound finance. It has already been stated that these banks raise the major portion of their capital by inviting deposits from the public. A portion of these deposits are on current account or for short periods not exceeding three months; a portion is on fixed deposit for terms exceeding one year, but more than half, in fact 54.7 per cent, is for periods ranging from three months to one year. The money so obtained is lent out to societies, and it may be said that, taking an average all round, it may be expected that each individual loan will be repaid, under normal agricultural conditions, in instalments spread over three to four years. If pressure were put on societies an increased amount could be forthcoming, but only at the cost of dislocating the arrangements of these societies and probably requiring their members to have recourse to the money lender. Again a year of agricultural scarcity may render societies unable to make any repayments in that year and will probably make it necessary to accommodate them with loans in excess of their normal annual requirements, if their members are not to be required to go to the money lender. It is thus obvious that, if the banks are to be in a position to repay deposits when due and demanded, they must equilibrate their finances with some care and provide an adequate amount of liquid resources. So far the actual necessity for doing this has not arisen in any marked degree owing to the great increase in the last few years of the deposits made in these banks. The amounts deposited have been each year largely in excess of those of previous years, and any deposits withdrawn have been met out of new deposits. Moreover a custom has lately grown up of obtaining advances from commercial banks either in the shape of loans of definite amount or of cash credits. Some of the more prudent banks have utilised the cash credits so obtained only to a limited extent, leaving the balance available to be drawn upon to meet calls by depositors. Others have drawn and employed in loans to societies practically the whole of their credit. In some cases the apex co-operative bank of the Province has undertaken to support its central banks, but this support has generally been dependent on a cash credit it has itself obtained from a commercial bank. It may be said however that in practically all cases, with the exception of undrawn cash credits on commercial or apex banks, no

central banks has retained or provided any liquid assets, beyond a small and quite inadequate supply of cash, to meet demands by its depositors or to provide for seasons of agricultural distress.

This has been due in some cases to a desire for dividends: in others to a readiness to take a present risk so as to secure eventual safety by a reserve fund built up out of larger profits: in others a too rapid growth of societies has imposed work on the Central Bank in excess of its financial capacities: in others it has been due to the fact that money is lent to societies at rates so near to those paid on deposits as to allow no margin for the provision of fluid resources: in others it has been frankly stated that in the event of difficulty over fluid resource they look to Government for assistance and their only duty is to see that their investments are sound and that there is no possibility of eventual loss. Whatever be the reason, there can be no question that the matter of adequate fluid resources has been generally neglected.

Those banks which have secured themselves by undrawn cash credits are distinctly in the minority, and at the same time the probability of the permanence of the arrangement must be open to serious doubt. The Joint Stock banks are not likely to increase materially the extent of the business which they are doing with co-operative banks, and it cannot be to their interest to keep always available for the use of co-operative banks large sums of money which they may be called upon to disburse very likely at a time when they themselves are most in need of them.

§ 11. Illustrations.

As an illustration of our remarks on the subject of central banks we append the balance sheets, drawn up on 1st January 1915, of two banks which are not unrepresentative of many institutions of this class. The figures in each case have been reduced so as to show each bank working on a one lakh basis.

Liabilities.		Rs.	Rs.
Deposits—			
From Individuals	On current account	2,590	
	Due for repayment in 1915	69,050	
	Due later	15,340	
From other societies		4,650	91,630
Share capital paid up		5,300	
Reserved fund		870	
Dividend equalisation fund		1,200	
Undistributed profits		1,000	8,370
Total			1,00,000

Assets.	Rs.	Rs.
Cash in hand or bank		2,600
Loans to societies of which repayments is expected in 1915		15,000
After 1915		82,000
Other items		400
Total		1,00,000

Deposits—			
From Individuals.	On current account.	4,670	
	Due in 1915	25,440	
	Due later.	7,260	
From other societies		23,000	
Loans from Joint Stock banks		19,760	80,130
Share capital paid up		16,000	
Reserve		2,500	
Dividend unpaid		650	
Other items		720	19,870
Total			1,00,000

Cash in hand or bank		4,160
Loans to societies of which repayments expected in 1915		24,000
After 1915		68,150
Other items		3,690
Total		1,00,000

It will be seen that in both cases the banks do current account business and that amount of cash in hand is practically equivalent to what they owe on current account. In both cases the bulk of their deposits is on a one year's basis, while the terms of their loans to societies are considerably longer. In the one case the contingent liabilities of the current year are far in excess of the repayments they expect to receive. In the other they are nearly equivalent, but in neither case does any permanent provision exist to meet withdrawals of deposits unsupported by repayments from societies, which might very well fail to come in at the time when wanted or might have to be postponed altogether. The second bank has a cash credit with a joint stock bank to the amount of Rs. 25,000, but it has already drawn and lent out Rs. 19,760 of this, and will probably have to utilise or keep in reserve Rs. 1,160 more to pay dividends and hold

against its current account. If the Joint Stock Bank is prepared in a time of stress to continue its support and does not on the other hand press for repayment of its loan of Rs. 19,760, the central bank will have some Rs. 4,000 available to meet fluctuations in its deposits in the current year. It will be noticed however that this bank holds a very large amount in deposit from other societies, of which a certain proportion is probably deposits passed on by other central banks which have no immediate use for them, and the bank should be prepared also for considerable calls on this account. The first bank is obviously purely capitalistic. It works on a very small share capital and considers the provision of dividend more important than the building up of a strong reserve.

On the other hand we append below the balance sheet of a third bank which seems to us to approach more nearly to a standard of safety.

LIABILITIES		Rs.	Rs.	ASSETS.	Rs.
Deposits —					
From Individuals.	On current account	3,600		Cash and Government paper . .	11,600
	Due for repayment in 1915	21,000		Loans to societies of which repayment is expected in 1915 . .	24,000
	After 1915	60,000		Later	64,000
From societies		3,800		Other items	400
From Joint Stock banks		600	89,000		
Share capital paid up . .		8,000			
Reserve fund		2,000			
Suspense (mainly for reserve fund)		1,000	11,000		
Total . . .			1,00,000	Total . . .	1,00,000

In this case the deposits are well distributed, and as a matter of fact nearly a half of the amount of Rs. 64,000 due after 1915 does not fall due until 1918, while the business of the bank is so arranged as to make the repayments by societies coincide with the terms of the deposits. The money taken from societies is small in amount, and is moreover the property of debtor societies and is not required by them to meet depositors. There is consequently after providing for current account and repaying the Joint Stock Bank, a balance of Rs. 7,400 to meet any withdrawals of deposits this year even if societies are unable to make any repayments,

The two first illustrations which we have given above will probably convey more clearly than any lengthy description the position of a large number of these banks. Put shortly, the conclusions at which we arrive

as regards these banks generally are that their management is honest and within its lights, efficient, and that no fault is to be found with the keeping of accounts or the disposal of money. With the exception that some of them keep current accounts for outside constituents, their business is practically limited to lending to primary societies, and, so long as these remain solvent and their members are able and willing to pay, their creditors need have no anxiety that they will not eventually get their money. At the same time there is certainly no assurance that, if even a not very considerable number of depositors wanted their money simultaneously, it would be forthcoming on the due date. At present a large proportion of the depositors have been the shareholders and directors and their relatives who, even when wanting their money, may often be persuaded to extend their deposits rather than embarrass the bank, but with the extension of the co-operative movement the proportion of this exceptional class of money must necessarily become less, and in any case it does not seem right that institutions of this nature should invite the deposit of public money unless they are in a position to fulfil scrupulously and punctually their obligations to their creditors.

§ 12. Need for provincial banks.

Obviously the first remedy for this state of affairs is the co-ordination of provincial co-operative finance in each province in a strong apex bank, or Provincial Bank, and to insist that Central Banks shall have all their financial dealings with other societies except their affiliated primary societies, through that apex bank. This will put an end to the system, which is a very real source of danger, of Central Banks investing their temporary surplus assets with each other. The money may be lent out on terms which do not make it available when wanted and the interlocking of their finances may very well result in the fall of one bringing down unnecessarily a number of others in its train. The Provincial Bank might also be the sole medium in the province for dealing with Presidency and Joint Stock Banks. Co-ordination and control in finance is essential and this can only be done within a province by an apex bank possessing the necessary authority. A Provincial Bank can also arrange more economically for the provision of fluid resource, a subject of which we shall treat below. In Bihar and the Central Provinces Provincial Banks have recently been constituted. In Burma the provincial co-operative finance can very well remain with the Mandalay Central Bank. If the Madras and Bombay Central Banks are to be placed in the position of Provincial Banks, their constitution will require some modification and they will require to be in a position to enable them to carry out the duties of apex banks. In othe other larger provinces Provincial Banks, should be formed. When Provincial Banks have

been duly constituted, the Central Banks in the province should be affiliated to them for the purposes of control and many of the smaller and weaker banks might with advantage be dissolved or amalgamated with other banks.

§ 13. Difficulties in maintaining standard of fluid resource.

There remains however the main difficulty in the matter of these banks, that they take money for comparatively short periods and invest practically the whole of their capital in loans for comparatively long terms under conditions which render it probable that in any one year they may receive practically no re-payments and which may preclude them from calling up or realising these loans if they themselves are pressed. If their only assets are the pro-notes of societies, they are not likely to be able to raise much on these in the ordinary market to repay their depositors. It seems necessary that these banks should equilibrate their business : that they should lend out to societies for such periods as to enable them to count each year on repayments from societies somewhat exceeding the amount of deposits which fall due that year : and that they should in addition maintain a fluid resource in the shape of cash or easily realisable securities. As regards the amount of this fluid resource we have had considerable difficulty in making recommendations. Co-operative banking is new in India and is in many ways entirely different from joint stock banking, and there are consequently few reliable data to go upon, but we think that each Central Bank might be required to hold an amount in liquid assets equivalent to the half of the total of all fixed deposits, which it might under the terms of such deposits be called on to repay within the next twelve months. In cases where current or savings bank accounts are kept practically the whole of the amount of such accounts would in addition have to be covered. In the case of the Provincial Bank the same conditions would apply, but it might be required to hold liquid assets to cover it for a period of one-third of the next twelve months, since its money is invested over a much larger area than that of Central Banks, and repayments are much less likely to be affected as a whole. Also, if the liquid resource of all the Central Banks is, as would ordinarily be the case, maintained by the Provincial Bank, it would appear to be possible to reduce the fraction to one-third, as it is less likely that all banks in the province would require assistance simultaneously. We have taken the period of six months as being the probable duration of a co-operative crisis. At the same time we recognise that the adoption of the conditions we have proposed may be difficult. Deposits for periods as long as are required for agricultural loans may not be obtained even on much dearer terms. We have proposed the imposition on Central Banks of the maintenance of a staff for assessment of credit supervision and audit, and the cost of this will have to come out of the bank's profit or be met eventually by an increase of the rates

at which members of societies borrow. The further cost of the maintenance of a fluid resource will have to be similarly met. In provinces where the rates at which deposits are obtained and at which members of societies borrow allow of a large margin, no immediate difficulty need be anticipated, but there are some provinces where the margins are small already and there is also everywhere a tendency for margins to contract. Where the margin cannot be increased the only alternative is to continue in the present state of financial instability or to provide an agency which would discount the pro-notes of societies for co-operative banks in times of need, and obviate the necessity of their keeping liquid resources. It is more than doubtful whether this agency could be found in the Provincial Banks, as these institutions are unlikely to be able without a guarantee from Government to raise money at rates substantially lower than those at which Central Banks borrow. The problem has already been experienced in all European countries and has been solved, in nearly every case where co-operation has been successfully established, by the State's arranging for the discount of co-operative paper with the ordinary state bank or with a specially constituted co-operative state bank.

§ 14. Further Suggestions.

There are a few further points on which we may touch here. We have recommended that the staff of Registrars should be increased, and it seems advisable that the cognate subjects of agriculture and industry should be co-ordinated under one head in each province, and we have therefore also recommended the appointment for this purpose, as opportunity offers, of a Development Commissioner who would have the necessary time and practical knowledge to devote himself entirely to the supervision of these branches of administration and whose recommendations and advice would carry due weight with his Government.

Although the subject of co-operation is, like other branches of administration, one primarily for each local Government to deal with inside its own area, it is a question whether Imperial and inter-provincial interests involved have not now grown so important as to justify its being treated on the same lines as education and agriculture by the appointment of a co-operative Adviser with the Government of India. The advice and counsel of such an officer would be very valuable to Provincial Governments, Development Commissioners or similar officers, and to Registrars themselves.

Lastly we think it right to inform Government that we found during our tour that considerable misapprehension existed as to its responsibility for the stability of co-operative institutions. We have found in some places a belief held that the movement was guaranteed by

Government a belief which, if not actually fostered by the local supporters of the movement, was not actively contradicted by them. In other cases Joint Stock Banks, and even Central Banks, lending to societies on the recommendation of the Registrar, have considered that the Government was thereby placed in a fiduciary position as regards such loans. We have on the other hand found cases where banks in advertising for deposits have expressly stated that, though they had the benefit of Government audit, they enjoyed no Government guarantee. We think that Government should impress on all its officers the necessity of allowing no misapprehension to exist as regards its relations with the co-operative movement and its degree of responsibility for co-operative institutions.

SWITZERLAND.

CO-OPERATIVE CATTLE-REARING SOCIETIES IN SWITZERLAND

By Joseph Frey

Manager of the Federation of Swiss Societies for the Rearing of Cattle of the Brown Swiss Breed, Lucerne.

SOURCES:

Abt (H.): Das Schweiz Braunvieh. (*The Brown Swiss Breed*). Huber and Co., Frauenfeld.
Käppeli (Dr. J.): Das Simmenthalervieh der Schweitz. (*The Simmenthal Dappled Swiss Breed*). K. J. Weis, Berna.

Cattle-rearing in Switzerland has been widely carried on from earliest times, thanks to the many mountain pastures and rich meadows that produce abundant and palatable feeding. But its development is due not only to the favourable conditions of soil, climate and fodder, nor to the numerous pastures, nor to the special aptitudes and predilections of the population for this branch of agriculture, but also to the fact that here from the earliest times were found productive breeds of cattle well adapted to the surroundings.

The two most important breeds in Switzerland — the Brown Swiss and the dappled Simmenthal — are of ancient origin, dating many centuries back. These breeds have always been kept free from crossing, and thus Switzerland possesses a great number of cattle of pure breed and of proved excellence, especially remarkable for their prepotency.

According to the latest census, made in 1911, the total number of cattle possessed by Switzerland is 1,443,483, of which 796,909 are cows, 352,255 oxen and young animals, and 26,207 bulls kept for breeding. The number of owners of cattle is 205,944. The total given above is composed chiefly of the two representative breeds, the Brown Swiss and the dappled Simmenthal. Of these two the Simmenthal is the more numerous. There are in Switzerland two other breeds also carefully preserved, that of Fribourg, patched with black, and that of Ering in the canton of Valais, but both limited to a small district.

For the Swiss agriculturist, cattle-rearing is the chief source of gain, and for this reason it has always been the object of careful attention not only on the part of the farmers but also on the part of the State; and many measures have been taken both by the Government and by private persons to encourage this industry, so important both to agriculture and to social economy. As small farms are the rule in Switzerland, it was soon found necessary to establish associations of breeders, chiefly with the object of improving the breeds.

The first co-operative society for cattle-breeding in Switzerland was founded in 1888. The original idea of founding a society on modern lines for the rearing of cattle was suggested by Prof. Krämer of Zurich, but the practical form it assumed is due to the initiative of Col. von Wattenwil of Bern. To him belongs the merit of having transformed thought into action. Associations for raising the above mentioned breeds of cattle soon became numerous, favoured as they were by various causes. Of these the chief was the new direction taken by agriculture in Switzerland between 1870 and 1880, when efforts were made to limit the cultivation of cereals and to extend the breeding and rearing of cattle; and at the same time the milk industry was developed and extended. The result was, as we have said, that small farms being the rule in Switzerland, the need of co-operation was strongly felt. A small proprietor rarely has the means to procure well-bred bulls which alone can ensure his prosperity. But if small proprietors are well organised, as in co-operative cattle-breeding societies, the disadvantages of small holdings are no longer felt, and it is possible to create those conditions which are indispensable to the systematic, continuous and successful breeding of cattle.

§ 1. Organisation and work of cattle-rearing societies.

There are now in Switzerland 850 societies for the rearing of cattle of both breeds in equal measure. There are in some cantons other co-operative societies solely for purchasing and keeping bulls.

The objects of co-operative societies for cattle-breeding in Switzerland are:

(1) the selection and proper maintenance of the best bulls;

(2) the selection and marking of the best cows and heifers;

(3) the systematic maintenance of animals for breeding purposes and the proper rearing of their calves;

(4) the regular keeping of a Herd-book with correct particulars as to the pedigree of the animals;

(5) enquiry as to capacity of production;

(6) the encouragement and facilitation of the sale of cattle for breeding purposes, and the protection of the interests involved;

(7) the exchange of information among the members of the society as to questions of breeding and feeding.

Some particulars will now be given as to the foundation, the constitution and the work of a co-operative cattle rearing society.

The society is founded by a certain number of agriculturists or breeders of the same neighbourhood or of adjoining districts, who subscribe to the byelaws.

The capital required for the purchase of a bull is generally collected by means of a quota (*Anteilscheinen*) of from 20 to 100 francs per person. The association comprises the general body of members, a President's Committee composed of from three to seven members, a Committee of Experts or Valuers and a Committee for the Examination of the Accounts. The Secretary of the society usually keeps the Herd-book (*Zucht- over Herdebuch*) and is nearly always one of the President's Committee. The Committee of Experts is generally composed of three members who may be all or in part elected among the members of the President's Committee. The share capital may be formed out of subscriptions and premiums paid by members joining the society later, from fees for animals entered in the Herd-book (one or two francs per head), from prizes gained by bulls belonging to the society, and from contributions from the State and the commune. The co-operative societies do not aim at making large profits, but they often endeavour, more especially the larger and older societies, to form a reserve fund to meet any eventuality. Members are not responsible for engagements made by the co-operative society to which they belong: it must fulfil then exclusively with its own capital. Since 1910 the Swiss Confederation has shared the cost of establishing co-operative cattle-rearing societies, granting to them sums of from 100 to 300 francs. The amount of the contribution depends on the quality of the cattle, and more especially of the bulls belonging to the society, as well as on the correct keeping of the Herd-book.

Individual co-operative societies vary much in importance; as a rule the number of members is from 10 to 50, but in exceptional cases there are 60 and even 100. The number of animals entered in the books varies from 30 to 100, sometimes even to 200 and more. The territory of a society may include one or more communes and extend even over a whole valley.

The choice of sires from among cattle belonging to members is made by the above mentioned Committee of Experts solely from among animals of pure breed and of the proper age. This Committee also buys bulls for the society and decides, generally only provisionally, as to the acceptance and entry of cows and heifers in the Herd-books. Their definite acceptance is in most cases made by the cantonal examining commission, which every year revises the assets of the society. Animals to be entered are marked on the left horn with the mark of the society and a progressive number. Should the animal be sold to any person not belonging to the society, or to a butcher, its name is erased from the Herd-book. This must be done also should the animal prove of inferior quality or of insufficient reproductive power. The bulls are chosen with the utmost care. The societies as a rule keep bulls which have certificates for service (*Belegscheinstiere*). A bull belonging to the society must not only possess beauty of form and have proved reproductive capacity, but must also be of a good breed and give

reasonable expectation that its good qualities will be transmitted to its descendants. The questions both of descendants and pedigree are of great importance in the selection of bulls. The co-operative societies generally buy only those bulls acknowledged to be the best, and therefore the prices paid are considerable, sometimes 4,000 or 5,000 francs and even more. It often happens that one bull is not sufficient for the larger co-operative societies which are sometimes obliged to buy a second or even a third, though others limit themselves to one, which they hire. In this case a regular contract is made by which members possessing bulls of good breed agree to put them at the disposal of other members on payment of a fixed sum by the society. Bulls thus hired are entered in the Herd-book of the society.

Cows and heifers are not entered in the books unless they are of good breed. Since the intervention of Government has made itself felt in the breeding of cattle, every animal must be examined according to a uniform system (classification by marks, highest number 100). In this way a certain uniformity is obtained in the acceptance of cattle, and now the only difference is as regards the minimum number of marks necessary for entry in the books. In consequence of the improvement in the quality of the animals the minimum has been raised and the examinations are more strict.

Co-operative societies for cattle-rearing have also brought about an improvement in the management of the animals. The society generally entrusts its own bulls to the care of one of its members who signs a regular contract by which he engages to feed and take care of the animal for a certain sum as compensation (*Wartgeld-Futtergeld*). There are special rules laid down by the society for the management, feeding and hiring out of the bulls. Besides fodder (hay and sometimes fresh grass) bulls should also have a certain quantity of more substantial food, under the form of bran, and especially ground oats. For cows and heifers there are common pastures. Alpine co-operative societies have mountain pastures to which they can send the animals for the summer months. The societies of the valleys are now continually endeavouring to buy or hire mountain pastures for the cattle of their members, for the beneficial effect of a summer in the mountains on the health and development of the animals, especially of the younger ones, is well known. It will be seen that owing to the co-operative societies much progress has been made in the breeding and management of cattle. The calves are more scientifically fed, receiving sufficient whole milk for a much longer time, and substantial food as they grow older. They are prepared for the mountain pastures by having full liberty in fields adapted to their needs. The development of the animals is encouraged and protected by sound methods, too early breeding being avoided. The co-operative societies have also undoubtedly contributed to encourage the breeders to perfect themselves by mutual instruction and good example.

These societies have always made a point of requiring a regular registration of cattle and in this respect they are worthy of all praise, for breeding could have no durable result without a precise knowledge of the

pedigree of the animals, and thus a carefully kept Herd-book is indispensable. The Swiss Department of Agriculture gives precise and minute directions as to the keeping of these books, so that the system is uniform throughout all the cattle-rearing territory.

Private Herd-books, without official character, are of little importance now that co-operative cattle-breeding societies are widely diffused.

The society's registers comprise the following books, principal and secondary:

The Herd-book (*Zucht buch*) properly so called, divided into two parts, one for bulls, the other for cows and heifers;
The Register of Admission (*Aufnahmheft*);
The Stall-book (*Stallbüchlen*);
The Service Certificates (*Sprungkarten*);
The Register of Service Certificates (*Belegscheinheft*);
The Register of Births (*Geburtsanzeiger*);
The Certificate of Sale, etc. (*Abmeldekarten*);
The Register of Young Animals (*Jungviehregister*);
The Extract from the Herd-book (*Zuchtbuchauszug*).

As already stated the animals to be entered in the books of the society must be marked on the left horn. In the Register of Admission the name and age of the animal and the name of its proprietor etc. must be entered, and from these particulars the regular entry in the Herd-book is made. For the exact keeping of the Herd-book, the Stall-book is of great importance; it must be kept ready for reference by every owner of a bull. In this book must be entered in chronological order all the services of the bull, also its name, number, and countersign or metal token, also the age of the cow and the name of her owner. From the Stall-book these particulars are taken for entry in the Herd-book in which births must also be registered when duly announced by the owner of the calves. If a member should hire a bull other than that belonging to the society he must inform the society by sending in the Service Certificate (*Sprungkarte*). When a bull is sold, the owner must give notice to the society by means of a special Certificate of Sale (*Abmeldekarte*). Note of this must be made in the Herd-book in which there is a space for entering the pedigree, the measurements, the classification of the points, and the reproductive capacity.

An essential part of the Herd-book is that which contains the certificates of service given by the Federation. Since 1891 the Swiss Department of Agriculture distributes to cattle owners the best bulls selected according to the Service Registers (*Belegscheinehefte*). The certificates are numbered, and contain the name, number, countersign and generally the pedigree of the bull. Cows and heifers also receive Service Certificates containing the name and address of the owner, the name, age and marks (number and countersign), the metal token (number and entry), and colour of the bull. The certificate holds good for four services, and bears the date of its issue and the signature of the writer (either the keeper of the bull or the keeper of the Herd-book). Another essential part of the certificate is the entry of the birth with the pedigree of the mother, the day of the birth, the name

of the calf, the number and the entry of the mark on the ear and the date, also the signature of the registrar.

The calves of such bulls and cows themselves destined for breeding purposes must bear on the right ear the federal mark placed there by men duly appointed. The owner of the animal must confirm the birth and pedigree of the calf before the registrar, calling two witnesses as prescribed by law. The registrars are appointed by districts Government offices and must be persons worthy of trust if not the district veterinary surgeons.

The respective cantons must supervise the keeping of the registers of service certificates. The registers are submitted in June of every year to the Swiss Department of Agriculture. Such registers are now in use all over Switzerland but more especially in those cantons where the Brown breed prevails. Since they were introduced and the consequent marking of calves with the federal metal token, the pedigree of the animals is securely established. Such a guarantee is daily required in commercial transactions, offering as does, a means of identifying the animal much more precisely and surely than by a paper of written notes. The pedigree of the animal is also proved by the federal Herd-book, and in later times by pedigree tables, which are becoming more and more general from their clearness and completeness. The appraisement of descent considered in the adjudication of prizes, and in part also in the admissibility of the bull for service, is calculated by marks.

A pedigree book is a new factor in guaranteeing pedigrees. It treats of the best breeding stocks and their descendants. In researches for purity of blood it is one of the best helps and renders excellent service in the purchase of animals for breeding. In 1911 the Swiss Agricultural Department published a pedigree book for the territory in which the Brown Swiss prevails in 1914, a similar book appeared for the Fribourg breed, edited, with the aid of a grant from the Government, by the Federation of the Canton of Fribourg.

Though the co-operative societies have displayed great efficiency in promoting regular registration and in keeping exact records of pedigree the same cannot be said with regard to records of productive capacity. There are some data successfully kept as to the produce of milk, chiefly on the great estates with stall farms, but these are few in comparison with the great extent of the breeding districts and the number of co-operative societies. The reasons for this arise partly from the natural conditions of the country. In the higher mountain regions nearly all the animals for breeding spend the whole summer in the Alpine pastures, exposed to continual changes of weather which causes difficulty in the study of their capabilities. Yet we cannot say that it is better in the valleys and that there is no need for greater care in such matters. Efforts are, however, being made for investigation, and sooner or later they must bear fruit.

The co-operative societies have a field for labour from which satisfactory results may be expected. Researches into capacity, as already said, comprise those on the production of milk, the weight of the cattle (living or dead),

and capacity for reproduction, of which however, the Herd-books, when kept with regularity furnish sufficient data.

§ 2. Federations of Swiss co-operative cattle-rearing societies.

After the establishment of numerous co-operative societies the need of a closer connection among themselves began to be felt and this led to the formation of federations in the chief cattle-breeding districts. With these several more societies soon united themselves. Some co-operative societies in 1890 formed the *Swiss Federation of Co-operative Societies for the Rearing of Simmenthal Cattle*; in 1897 the *Swiss Federation of Co-operative Societies for the Rearing of Brown Cattle* was formed. Both extended rapidly. At the present time the first comprises 340 co-operative societies with 10,371 members, and 26,510 head of cattle entered in its registers; the second numbers 190 co-operative societies with 6,347 members and 21,900 head of cattle entered in its books (1).

The aim of these federations is to improve the organisation of the co-operative societies and of cattle-rearing in general, to facilitate the exchange of sires, to create uniformity of method in the examination and valuation of cattle, to institute conferences of judges appointed for the conferring of prizes after due researches as to production, to take part in exhibitions and to favour trade in cattle for breeding. They also aim at a uniform system of keeping the Herd-books, instituting inspections and prizes.

To encourage the exchange of sires, these federations organised special fairs for bulls, which are held annually towards the end of August or early in September, at Ostermundingen for Simmenthal cattle, and at Zug for Brown cattle. To each of these fairs, which are also of the nature of exhibitions, are sent from 800 to 1,000 bulls; they continue for three or four days and are frequented by foreigners as well as by Swiss, offering an excellent opportunity for the purchase of good breeding material. The bulls are judged, and prizes awarded by a specially appointed jury. To the best bulls is granted a certificate for service, to the younger for one year, to the older without a time limit. Sometimes whole herds of breeding cattle (*Zuchtkollektionen*) are sent to the fairs for exhibition and competition for prizes. They comprise the heads of the herd and their male descendants, thus affording an opportunity to visitors to the fair of ascertaining precisely the pedigrees of the animals and of guidance in questions of breeding. The federations encourage the sale of breeding-cattle by sending them to exhibitions, especially those in foreign countries. Convenient permanent offices for transaction of sales have been established and they furnish every possible information and conduct exchanges of sires. There have been

(1) In 1911 the co-operative societies of S. Gall separated themselves from the federation which had previously comprised 231 co-operatives with 7,520 members and 23,110 head of cattle.

several meetings of members of the juries appointed to confer prizes in both the above mentioned territories, and to these meetings all the cantons send their best experts. Such reunions tend to give greater certainty in judging the cattle, and in directing the question of cattle-breeding in general. They have contributed in a remarkable manner to uniformity of method in judging the animals. For this purposes the federations likewise established courses of lectures on the valuation of the cattle for experts both present and future.

They have also done much for uniformity in the manner of keeping the Herd-book so much so that the same system has been everywhere adopted. This system is fully explained in the pamphlet "Hints on the Keeping of Herd-books," edited under the care of the two federations with the help of the Swiss Agricultural Department; in the pamphlet a specimen erd-book is given. All Herd-books, even those of co-operative societies not included in the federations are examined annually by special inspectors and the results are then reported to the relative co-operative societies and to the canton and federal authorities.

Every three years, prizes are conferred to the federated Societies which are divided into three sections so that each may share in the prizes once in every three years. The decision on the Herd-books includes those on the keeping of the stall-books, the registers of certificates of service, of the accepance and cancelling of animals, registration of calves, enquiries into the profits and capabilities of the co-operative society. The highest degree of merit is expressed by 50 marks divided among the sections. There are three grades of prizes; those societies which have less than 30 marks are excluded. The prizes are from 20 to 50 francs according to grade, and usually they are assigned to the book-keeper who also receives from the society a special reward in consideration of his onerous labours.

Besides the two already named federations, there are others in Switzerland worked with the same objects. In 1911 the co-operative societies for the raising of Brown Swiss cattle in the canton of S. Gall (formerly belonging to the great Swiss Federation) constituted themselves into a cantonal federation, which afterwards took the name of Federation of Co-operative Societies of Eastern Switzerland for the Rearing of Brown Swiss Cattle. It comprises 90 co-operative societies and holds a fair for bulls every year at Rapperswil. In 1898 in the breeding district of Simmenthal cattle, the was founded ' Federation of Co-operative Societies of Eastern Switzerland Amongst the Breeders of Simmenthal Cattle." This federation at present comprises about 40 co-operative societies and every year it holds a fair for bulls at Winterthur. In 1890 breeders of the Simmenthal breed in the Bernese Oberland (northern part of the Canton of Berne) founded the "Federation of Co-operative Societies for the Rearing of the Alpine Cattle of Simmenthal" and finally in the Canton of Fribourg there is the "Federation of Co-operative Societies for the Rearing of Fribourg Cattle," comprising 30 societies, every autumn holding a fair for bulls at Boll. Modest in their origin, the Swiss co-operative societies have attained to a high state of development in a short time, due in a large measure to the vigilance and

assistance of the governing authorities. The co-operative societies exercise a beneficent and durable influence on the raising and management of the animals. In these there is a marked improvement, not only in form but also in their capacity for production. This fact is proved in cattle shows, in competitions in production, and in the constant requests from abroad for breeding cattle. These requests also prove to us that our bovine races systematically bred with a view to reproduction (*kombinierte Seistung*) give the best results under varied climatic conditions, they being very easily acclimatised.

Notwithstanding the general success of these Swiss associations there were occasional failures which led even to some of them being completely broken up. There were many causes for these failures, such as errors in the selection of sires, disease and epidemics in the herds, unfavourable local conditions, errors in the selection of managers, exaggerated hopes of many members, and want of constant activity and perseverance. Looking at the subject in every way, however, cases of failure are only exceptional. Good results are slow in coming and an immediate reward does not follow the labours of members, for success will only come through, constant diligence and perseverance. We may however affirm that institutions are frequently established in suitable places under the direction of specialists, with members fully comprehending their mission, all ready to work together in the common undertaking, and that these societies fully correspond to all the hopes entertained.

Part II: Insurance and Thrift

ITALY.

PROPOSAL FOR A BILL TO EXTEND COMPULSORY INSURANCE TO ACCIDENTS IN AGRICULTURAL LABOUR.

SOURCES :

TESTO UNICO DELLA LEGGE PER GLI INFORTUNI DEGLI OPERAI SUL LAVORO, approvato con R. Decreto 31 gennaio 1904, n. 51 (*Codified text of the Law on workmen's accidents, approved by Royal Decree, 31st. January, 1904, No. 51.*).

REGOLAMENTO PER L'ESECUZIONE DELLA LEGGE PREDETTA, approvato con R. Decreto 13 marzo 1904, n. 14 (*Regulation for the carrying out of the aforesaid law, approved by Royal Decree, 13th. March, 1904, No. 141*).

PROPOSTA DI LEGGE D'INIZIATIVA DEL SENATORE EMILIO CONTI SULL'" ASSICURAZIONE OBBLIGATORIA DELLA TERRA PER GLI INFORTUNI DEI CONTADINI SUL LAVORO, " svolta e presa in considerazione nella tornata del 30 marzo 1909. (*Private member's bill introduced by Senator Emilio Conti on " Compulsory insurance of the land against accidents to agricultural labourers, " presented and taken into consideration by the Senate, at the sitting on the 30th. March, 1909*).

DISEGNO DI LEGGE No. 386, PRESENTATO DAL PRESIDENTE DEL CONSIGLIO, MINISTRO DELL'INTERNO (LUZZATTI), DI CONCERTO COL MINISTRO DI AGRICOLTURA, INDUSTRIA E COMMERCIO (RAINERI), E COL MINISTRO DELLE FINANZE (FACTA) NELLA TORNATA DEL 5 DICEMBRE 1910 SUGLI " INFORTUNI SUL LAVORO NELL'AGRICOLTURA. " (*Bill No. 386, introduced by the President of the Council and Minister of the Interior, Luzzatti, supported by the Minister of Agriculture, Industry and Commerce, Raineri, and the Minister of Finance, Facta, on 5th. December 1910, on " Workmen's Accidents in Agriculture. "*)

SCHEMA PER UN DISEGNO DI LEGGE PER L'ESTENSIONE DELL'ASSICURAZIONE OBBLIGATORIA AGLI INFORTUNI SUL LAVORO AGRICOLO, elaborato dalla Commissione nominata con Decreto Ministeriale del 26 marzo 1913 per lo studio della riforma della vigente legge sugli infortuni (*Proposals for a Bill to extend compulsory insurance to accidents in agricultural labour, drawn up by the Commission appointed by Ministerial Decree of 26th. March, 1913, to consider the reform of the existing law relating to accidents*).

FERRARI (Prof. Prospero) : L'assicurazione contro gli infortuni sul lavoro in agricoltura (*Insurance against accidents in agricultural labour.*) Extract from the *Monthly Bulletin of Economic and Social Intelligence* (Italian Edition), Vol. XVI., Year V, No. 11, November, 1914.

FERRARI (Prof. Prospero) and SERRAGLI (Pier Francesco), Advocate : L'assicurazione obbligatoria per gli infortuni sui lavori agricoli (*Compulsory insurance against accidents in agricultural labour.*) First subject discussed at the 44th. Agricultural Congress held at Florence 26th. to 29th. April 1914. Florence, 1914 : G. Ramella.

ALTOBELLI (Argentina) : Per una legge sugli infortuni nell'agricoltura (*For a law on Accidents in Agricultural Labour.*) Report presented to the 5th. Congress of the General Federation of Labour. Genoa : June, 1914.

As is well known, there is in Italy no compulsory insurance of workmen except in industrial occupations, and in some branches of agricultural labour. The existing law on accidents (Codified text, 31st. January, 1904, No. 51) makes compulsory the insurance of agricultural labourers in the following cases :

(*a*) When, being more than five in number, they are engaged in drainage and embankment works; the regulation of mountain pools; prevention of land-slips; felling trees or thinning woods or transporting timber to depôts on the banks of rivers or rapid streams or beside roads, or throwing the timber from the stores into rivers and streams (Sec. 1, Sub-sec. 2.);

(*b*) When, being more than five in number, they are employed in industrial workshops (oil-mills, wine-making establishments, wine-stores, etc.), in which machines not directly driven by the labourer are used (Sec. 1, Sub-sec. 3);

(*c*) When, whatever their number, they are in attendance on machines driven by inanimate agency or the motors by which they are driven when such machines are used for agricultural purposes (Sec. 1, Sub-sec. 4);

(*d*) When using cannons or other apparatus for firing against hail (Sec. 1, Sub-sec. 5).

The greater number, however, of agricultural labourers do not enjoy the protection of the law. From the still comparatively limited use of machinery in agriculture and from the fact that in the case of work done out of doors, as agriculture generally is, the use of machines does not, as the law at present stands, imply any obligation to insure against accidents (except when machines are driven by inanimate force and only in the case of workmen in attendance on such machines) it results that though agricultural labourers are much more numerous than factory workers, many more of these last come within the purview of the law, so that " by reason of the large number of labourers to be protected, the extension of compulsory insurance, even in the case of work done without machinery, is more urgent for those engaged in agriculture than for those engaged in manufacturing industries (1). "

It may be added that the idea, often put forward, that agriculture is a less dangerous occupation than industrial labour and that agricultural accidents are so much less numerous than industrial accidents, that there is

(1) See the report which accompanies the Luzzatti-Raineri Bill, mentioned in the sources of the present article.

no urgent need to provide insurance against them, is now recognised to be entirely unfounded and at variance with the facts. Apart, in fact, from the increasing use of machinery in farming, which materially increases the number of accidents, many accidents occur from lightning, the management of live-stock, etc., which represent the special risks incurred by agriculturists.

But if the problem of general and compulsory insurance of agricultural labourers has not yet found a solution in legislation (1), it has been carefully considered and discussed and many solutions have been proposed. In the *Bulletin* of February, 1911, we examined the Luzzatti-Raineri Bill presented to the Senate on the 5th. December, 1910. We shall now consider a Bill *to extend compulsory insurance to accidents in agricultural labour*, drawn up by a special committee appointed in 1913 by Nitti, then Minister of Agriculture. As some of the principles upon which it is based are quite new and differ from those of previous bills, we think it desirable, for purposes of comparison, to give an outline of the earlier proposals.

§ 1. Previous bills on insurance against accidents in agricultural labour.

From 1906 there was a succession of bills for the extension of compulsory insurance to accidents in agricultural labour. These were drawn up on very different principles, as will be seen from the short sketch here given.

The Conti Bill. — This Bill was first introduced into the Senate of by the Hon. Emilio Conti on the 31st. January, 1907, under the title of "*Compulsory insurance of agricultural labourers against accidents.*" It was again brought forward with some modifications in the sitting of the 30th. March, 1909, under the title of "*Compulsory insurance of land against accidents to labourers.*" On the 30th. April, 1910, it was favourably reported upon

(1) Some employers have, however, for a long time felt the need of providing voluntarily for the insurance of the labourers on their farms, and have accordingly formed special mutual societies among themselves. Of these there are already six in Italy, viz. at Vercelli, Milan, Turin, Bologna and Rome. Vercelli, the oldest, was founded in 1902 by the Association of Agriculturists of the district. It provides compensation in case of death or permanent disablement, total or partial, for all labourers, permanent or casual, and sometimes also in cases of temporary disablement. In 1903 it contained 741 members with a to al insured area of 97,900 hectares and about 80,000 labourers. The Mutual Bank of Florence is also worthy of mention; founded in 1908 it contained 731 members with 931 insured farms, 135,831 hectares in extent, on the 28th. February, 1915. It insures all persons employed on farms in any kind of work, permanent or temporary. The persons insured numbered at the above date about 125,000 The annual premium is calculated according to the size of the farm, the nature of the crops, the proportion between area and rural population, the special risks incurred in cultivating certain crops, etc.

by the Central Office of the Senate, which introduced some slight alterations into it. Its fundamental ideas are the following:

(1) The insurance of labourers in rural holdings to be an obligation inherent in such property. But this not to be an absolute principle; exception to be made for land which is rented, because in that case the obligation and responsibility of insurance rest on the tenant who has undertaken the management of the land, without the intervention of the proprietor.

(2) The burden of insurance to rest solely upon the proprietor, if he personally manages the land; but upon the tenant if the property be let. In the case of land held on the métayer system or other form of share-tenancy the cost of insurance to be shared between the landlord and the share-tenant or métayer in equal parts if the profits be equally divided; but, if the profits are not so divided, two-thirds of the insurance premium to be paid by the landlord and one-third by the share-tenant or métayer.

(3) With the exceptions given in No. 4, the insurance to be extended to all agricultural labourers, this term to include peasants of both sexes who are occupied, whether temporarily or permanently, in any kind of work indispensable for cultivation or agricultural production or for the management of farms, including such work as, by reason of affinity and necessary connection with production, may be considered as purely agricultural, as well as work done habitually or exceptionally in dwelling-houses, farms, dairies, oil-mills, wine-making establishments, reservoirs, or any other kind of labour indispensable to agriculture and production.

(4) Insurance not to be compulsory for peasants of either sex below the age of 13 or over 70; but those who are employed in work contemplated by the law of insurance against accidents to continue to be insured in accordance with that law.

(5) Accidents for which compensation may be claimed to be only those which cause death or permanent disablement, complete or partial, when such disablement is the result of injuries received in work.

(6) The limit of compensation to be 2,500 francs either in case of death or of complete permanent disablement; but in the case of death the compensation to be reduced to 1,000 francs if the deceased was neither married nor the support of a family: the money to pass to his heirs.

(7) The principle of free selection of the insurance institution to remain in force, as in the existing law on accidents in industrial labour.

(8) The amount of the insurance premium to be fixed according to the area of the farm, and the various crops cultivated. For small holdings of less than one hectare the premium to be reduced by one half.

(9) The decision of disputes as to the nature or the reality of the consequences of the accident to be referred to a council of arbitration.

The original Bill proposed by Senator Conti also comprised compensation for temporary disablement to the amount of 1 fr. 50 or 1 fr. according to the circumstances of the injured person, but this suggestion was rejected by the Central Office of the Senate.

But the bill in question was not discussed by the Senate, as before it came up for discussion, Luzzatti, President of the Council of Ministers and

Minister of the Interior, supported by Raineri, Minister of Agriculture, Industry and Commerce, at the sitting of the 5th. December, 1910, proposed to the Senate on his own initiative a bill on the subject of "*Accidents in agricultural labour*," a bill of which we have already spoken in this *Bulletin* and to which it is now desirable to refer.

The Luzzatti-Raineri Bill. — This Bill refers to all who are employed, no matter in what number, on farms or in forests, including those engaged in tending or in raising stock, or in the preparation, preservation, transformation or carriage of agricultural produce "in so far as such work is carried on in connection with or in economic dependence on the management of a farm or a forest." Exception is made for workmen employed in agricultural or forest labour contemplated by the Law of the 31st. January, 1904, No. 51, to whom the provisions of the law were to continue to be applicable.

The only exemption from the obligation to insure was to be the proprietor "who personally cultivated his own land, either alone or aided exclusively by the members of his own family."

The term workman was to be thus defined: "Whoever, either permanently or temporarily, is occupied in agricultural or forest labour, with fixed wages, on piece work, or without remuneration; whoever, under the same conditions, even without actually taking part in the work, superintends the labour of others, provided that his fixed remuneration do not exceed 7 francs per day." To those who are under nine years of age or over seventy, the bill was not to apply.

The insurance was to cover cases of death or permanent disablement, either total or partial to a degree above 20 per cent, thus excluding temporary disablement. The premium was to be fixed in accordance with the extent of the land and the crops cultivated. Its cost was to fall exclusively on the proprietor if he directly cultivated the land and exclusively on the tenant in the case of rented land, but where the land was held on the métayer system or other system of share-tenancy, the proprietor was to pay three-fifths and the métayer or share-tenant two-fifths. The proposed compensation amounted to 2000 fr. in case of death, for adult males to 1000 fr. for adult females, and 500 fr. for children. Workers of either sex who have passed the age of 15 were to be considered adults; those who are between the ages of 9 and 15 to be considered children. In case of complete permanent disablement, the compensation was to be 2500 fr. for men, and 1200 fr. for women and children. Lastly, in the case of permanent partial disablement the compensation was to be fixed at the sum appointed for complete disablement reduced in the same proportion as the reduction of capacity for work. As already stated, compensation was not to be claimed if the percentage of reduction of capacity to work were equal to or less than 20.

The insurance was to be carried out freely in private establishments in the kingdom authorised to constitute *Casse consorziali*, authorised in their turn to undertake the insurance of workmen engaged in any work contemplated by the Law of the 31st. January, 1904. These banks were to be entirely exempted from all duties and taxes.

This Bill was examined by the Central Office of the Senate, which in its report of the 25th. March, 1912, decided, by a majority of three votes out of five, against the principle of compulsory insurance for agricultural labour, believing that by means of free contributions from employers and labourers an honest and efficacious system of compensation for accidents in agricultural labour could be secured. Accordingly the bill never came up for discussion in Parliament. We now pass at once to the consideration of the bill drawn up by the commission appointed in 1913 by Nitti, ex-Minister of Agriculture. This bill is on a basis totally different from that of the earlier bills.

§ 2. Bill of 1913 for the extension to agricultural labour of compulsory insurance against accidents.

Properly speaking, this was an outline of a bill, which, with some slight changes, would probably have been presented to Parliament if the Ministry by which it was initiated had not fallen in 1914. It is divided into the following heads :

Limits to application of the law. — According to this proposal, the insurance is to apply to all persons who, being at least nine years of age, are employed, no matter in what number, on any farm or forest, and not protected by the laws concerning industrial accidents, thus including all wage-earners, permanent or temporary, proprietors, métayers, and working tenants, as well as the wives and children of such persons. Foremen are also to be included provided they do not receive more than seven francs per day.

The work contemplated as agricultural or forestry labour includes :

(*a*) cultivation of the land and work connected with and accessory to it, such as the tending and raising of stock, the preparation, preservation, transformation and carriage of the produce of the holdings ;

(*b*) sylviculture, and the industries connected with and accessory to it.

Insurance. — The insurance is to be compulsory and must be carried out by the owner or occupier of an agricultural holding or forest at his own expense ; it is to covers cases of accidents followed by death, of complete permanent disablement or of partial permanent disablement which diminishes by more than one-sixth the capacity for work.

The premium is to be calculated according to the extent of the land and the risks of the various crops ; it is to be collected like direct taxes by means of lists to be furnished to the public tax-gatherer. The lowest compensations are to be fixed as shown in the following table :

TABLE I. — *Compensations for accidents.*

Age of injured person	Sex	
	Men	Women
	Fr.	Fr.
Fatal accidents:		
From 9 to 15 years.	500	500
» 15 » 23 »	2,000	1,000
» 23 » 55 »	2,500	1,250
» 55 » 75 »	1,500	800
Injuries which cause complete permanent disablement:		
From 9 to 15 years.	1,200	1,000
» 15 » 23 »	2,500	1,500
» 23 » 55 »	3,250	2,000
» 55 » 75 »	2,000	1,000

To the compensation shown above is added a tenth for every child under 15 years old, up to 50 per cent. For permanent partial disablement the proposed compensation is calculated as that fixed for permanent complete disablement, reduced in the same proportion as the reduction of capacity for work. Lastly, widows who are heads of families are to be on a par with men as regards the amount of compensation.

Insurance Establishments. — Insurance against agricultural accidents according to this bill, is to be carried on exclusively by Compulsory Societies (*Consorzi obbligatorii*) of which the number, the place of business and the sphere of operations are to be determined by royal decree. These Societies are to be legally recognised bodies ; they are to be exempt from every tax, and to be permitted to carry on freely under separate management other branches of agricultural insurance and re-insurance. Their rules are to be approved by the Ministry of Agriculture, Industry, and Commerce.

Each Society is to have an Assembly of from 25 to 50 members, of whom two-fifths are to be elected by the representatives of the organisations of employers, two-fifths by representatives of organisations of agricultural labourers and one-fifth by the Provincial Council.

Of the organisations of employers and labourers who elect the abovementioned representatives a list is to be submitted for approval to the Ministry of Agriculture, Industry, and Commerce, after consultation with the Superior Councils of Agriculture and Labour.

This list must show the number of votes to which each organisation

has a right in proportion to the number of hectares of land occupied by the members, to the valuation and to the number of labourers.

Every three years half the members of each class in the Assembly shall retire ; for the first three years the retiring members shall be chosen by lot ; after that time by seniority.

Where there are no societies of employers or labourers, or if these are not considered by the Ministry of Agriculture, Industry, and Commerce adequately to represent the two classes for the purpose of electing the members of the assembly, the choice is to be made by the Ministry of Agriculture, Industry and Commerce, after consultation with the agricultural societies, both of employers and labourers, which are represented in the Superior Council of Labour.

Over every society there is to be a Committee of Management, composed of a President, nominated by the Minister of Agriculture, Industry and Commerce, and of four members, elected by the assembly from amongst its own members by a majority of votes. For each Society three syndics are also to be appointed, one by the Minister of Agriculture, Industry and Commerce and two by the Assembly, the procedure being similar to that for the election of the Committee of Management. The members of this Committee are to hold office for three years, and the syndics for one year. Both may be re-elected.

The tariffs of premiums to be charged by the Society are to be fixed by Royal Decree, issued at the request of the Minister of Agriculture, Industry and Commerce, after consultation with the National Accidents Bank and the Council of Thrift and Social Insurance. From amongst these tariffs the assembly of the Society is to choose those which it proposes to adopt and its decision is to be submitted to the Ministry of Agriculture which may, if it think fit, impose other tariffs. The Committee of Management then decides upon the tariffs applicable to each separate farm.

Every Society shall be obliged to reinsure from 25 to 50 per cent of its own risks with the National Accidents Bank. Where a Compulsory Society cannot be established or is not in working order, the National Accidents Bank shall act in place of such a Society.

Assessment and payment of compensation. — Compensation is to be assessed by the Committees of Management of the Societies. Disputes which may arise as to the right to compensation and the assessment of the amount shall be referred to *Provincial Arbitration Commissions*, composed of three members, of whom one must be a judge, and the other two delegates respectively from the associations of employers and of agricultural labourers. Against the decisions of these commissions appeal may be made to a Central Commission, with headquarters in Rome, at the Ministry of Agriculture, Industry and Commerce. Its president is to be a Councillor of the Court of Cassation and among its members are to be one of the higher officials of the Ministry, a doctor with special scientific and professional knowledge in matters relating to accidents, a representative of those who are under obligation to insure, and a representative of the persons insured.

The leading characteristics of this Bill are, therefore, the following: compulsory association for insurance without free choice of the institution where the insurance is to be effected; compulsory re-insurance in the National Accidents Bank; the institution of Provincial Arbitration Commissions; compensation varying according to the age of the injured persons.

This bill has been much discussed, but it is not necessary to detail here the praise and criticism it has evoked. It seems better to enumerate in the next paragraph the chief views expressed in Italy on this important question at the most recent agricultural congresses.

§ 3. The resolutions of the recent congresses at Florence and Genoa.

On the 26th. of April, 1914, the 44th. Congress of the Society of Italian Agriculturists (*Società degli Agricoltori Italiani*) was opened at Florence. The first subject on the agenda was that of compulsory insurance against accidents in agricultural labour, and after a discussion the following fundamental provisions were approved as suitable for inclusion in the proposed law:

(1) That the law for compulsory insurance against accidents in agricultural work be co-ordinated with that of 31st. January, 1904, No. 51, taking away all clauses regarding agricultural and forestry labour; (2) The Compulsory Societies (*Consorzi obbligatorii*) to have the power to insure against accidents in all the occupations mentioned in the Law of the 31st. January, 1904, with supplementary premiums for agricultural buildings, maintenance of buildings, use of machinery, manipulation and transformation of agricultural produce, etc.; (3) The Compulsory Societies to be exempted from keeping wage books and registers; (4) Compensation to be paid in case of death, permanent total disablement and permanent partial disablement, with the exclusion of disablement estimated according to rules to be established, as being less than 10 % of complete disablement; (5) Compensations for permanent total disablement or for permanent partial disablement, when estimated at more than 40 % of total disablement to be paid, not in a lump sum, but in annual instalments to be disbursed by the National Bank of Thrift; (6) For temporary incapacity for work of those paid by the day (labourers receiving fixed wages or paid by the piece) rules to be established for the purpose of guaranteeing the honesty of the claims and the duration, total or partial, of the disablement; (7) The annual premium to be fixed according to tariffs based on the area of the land, taking into account the intensity of its cultivation and the attendant risks, of the average rate of wages paid and of the various agricultural zones; (8) That the obligation and expense of insurance be established with precise rules for anyone undertaking it, account being taken of the various systems of management of rural holdings; (9) That the Compulsory Agricultural Insurance Societies be managed exclusively by their members on whom fall the obligation and espense of insurance, and that they work in accordance with the principle

of mutuality ; (10) That a limit be fixed to the working of the Compulsory Societies in respect of the total amount of the premiums with a limit not less than 200 000 francs; (11) That measures be taken to guarantee the right of the injured person to receive the compensation allowed him by law without the intervention of third persons, and that the insuring body be guaranteed from speculators on accidents ; (12) That the settlement of disagreements be made by Arbitration Committees whose decisions must be in conformity with the rules now in force regarding arbitrators; (13) The Compulsory Societies to be exempt from any tax whatever on moveable property, on business, stamp duties, etc.; (14) That re-insurance be optional for those societies which have a reserve fund sufficient to guarantee the payment of claims and, if rendered obligatory for the Societies to be formed, that it be made in such a manner as to put no obstacle in the way of the prompt payment of claims.

In the month of June of the same year, the problem of insurance against agricultural accidents was discussed in the 4th. National Congress of the *General Federation of Labour*, which met at Genoa and passed the following resolutions: (1) That insurance against agricultural accidents be rendered compulsory by means of a special law which will protect without distinction all labourers who work on the land or in any undertaking related or connected therewith, including small agricultural proprietors; (2) That the said insurance cover every kind of agricultural accident, viz. death (to those entitled), permanent disablement, either total or partial, and temporary disablement, and be applicable to adults of both sexes and to children above nine years of age; (3) That the premium for insurance be calculated in proportion the area of the land, to the nature of its cultivation, and the amount of attendant risks and that compensation be computed on the average of wages ; (4) That the burden of payment of premium rest on the owner of rural property, without any portion being contributed by métayers, share-tenants, tenants, or land-renting societies, and that the legal liability for the insurance rest solely on the proprietor ; (5) That the National Insurance Bank for Workmen's Accidents (with needful alterations in its constitution) be preferred to the societies proposed in the Bill under consideration.

We refrain from giving the resolutions of other Congresses of less importance, only remarking that though all in Italy are agreed on the necessity of a special law for insurance against agricultural accidents, all are not agreed that such insurance should be compulsory or in regard to the bodies through which insurance should be effected nor to the amount of compensation. Thus, for instance the Central Office of the Senate declared itself opposed to compulsory insurance in its report on the Luzzatti-Raineri Bill in 1910.

The diversity of opinion regarding the limits to the payment of compensation is even more marked. Thus, it has not yet been decided to what degree of disablement compensation may be granted. The Bill of 1910 excluded incapacity for work when lower than 20 %, that of 1913 when lower than 16 %, etc.

And even greater was the division of opinion concerning compensation during temporary disablement. It is payable to all workmen protected by the Law of 31st. January, 1904, on industrial accidents. As to agricultural accidents, all the bills examined exclude, as we have seen, compensation during temporary disablement; it was, however, claimed by the associations of labourers and on their behalf by the Federation of agricultural labourers at the 4th. Congress of Genoa above mentioned.

Such, in short, is the state of the question, in the legislative solution of which the special conditions of Italian agriculture should be taken into account as well as the experience already gained in the matter by the Mutual Banks which arose though the initiative of landowners and farmers and to which we have already more than once called the attention of our readers.

§ 4. The experiment made by the National Accidents Bank in insurance against agricultural accidents.

That the reader may be fully informed with regard to this question we describe, lastly, an experiment in insurance against agricultural accidents made by the National Accidents Bank (1) while waiting for the desired law.

The Bank was authorised to make this experiment by the Royal Decree of the 14th. May, 1914, No. 547, which sanctioned the relative tariff of premiums (2). We now give some particulars respecting the special policy adopted by this institution for insurance against accidents (3). It is applicable to all agricultural labour not subject to compulsory insurance, and thus extends to the direct cultivation of the soil as well as to all the accessory labours of harvesting, preparation, transformation and carriage of produce, of cattle-raising, care of land, produce, animals, etc.

(1) The National Bank of Insurance against Workman's Accidents, founded under the Law of the 8th. July, 1883, No. 1473, is a public and official institution for insurance against accidents, placed under the supervision of the Ministry of Agriculture, Industry and Commerce. It is authorised to undertake the following transactions: collective insurances, in the terms of the Law of the 31st. January, 1904, No. 51; insurance of civil liability towards workmen; re-insurance of syndicates, of private banks, and banking societies; free insurance of industrial workers; free insurance of agricultural labourers against accidents; re-insurance of mutual societies for insurance against agricultural accidents, etc.

(2) See *Gazzetta Ufficiale del Regno d'Italia*, Rome, No. 151, 26th. June 1914.

(3) Many kinds of agricultural labour not yet subject to compulsory insurance had already been explicitly contemplated by the general tariff of the National Accidents Bank sanctioned by Royal Decree of the 13th. Dec. 1903, No. 524, but the insurance was subject to the rules for collective compulsory insurance: multiple compensation proportioned to wages paid to persons insured, and therefore premiums calculated in proportion to wages and consequent obligation to keep wage-books; or on the other hand fixed compensation and premiums in proportion to them and to the number of persons insured, according to lists kept for the purpose. These form-

The wide range of such labours, and the necessity or at least the desirability for agriculturists to reside constantly on or near the farm occasion many possibilities of injury to the physical capacity of persons, who, according to the wide interpretation of the words " in the course of the work, " would be entitled to compensation. It is, therefore, necessary to find an exact definition of an accident in work, not susceptible of too wide an interpretation. According to the new policy of the National Bank, compensation is payable for every accident to insured workmen on the spot where the work is done, and arising from it, which causes death or permanent or temporary disablement.

All labourers of both sexes above the age of nine, employed in the above mentioned kinds of work whether permanently or occasionally, are admitted to the benefits of insurance. Those who superintend others without sharing personally in the work are considered as labourers. The amount of compensation varies according to the age and sex of the person injured, and to the kind of insurance selected. The Bank, has, in fact, adopted three forms of insurance, viz. (*a*) maximum compensation ; (*b*) medium compensation ; (*c*) minimum compensation. The substantial differences among these are shown in the following table :

alities, often difficult of application even in industrial insurance, have been found almost impossible in agriculture; premiums calculated on wages are in fact an excessive burden on the scanty returns of the soil. Therefore the Bank had in this case to confine itself to a few collective contracts with fixed compensation and a few individual policies. The necessity of finding easier and less complicated forms, and lower tariffs to relieve the burden of insurance on agriculture, soon urged the Bank to find a new form of contract, the cost of which should be the lowest possible, and which should be easily understood by the least cultivated intelligence. It is to this form of contract that the present section refers.

TABLE II. — *Compensation according to the different kinds of insurance.*

Nature of accident	Fixed insured compensation	Kind of insurance according to compensation		
		Maximum	Medium	Minimum
Death	Men (from 15 years upwards) and widows who are heads of families . . . . . 2000 fr. Adult women (from 15 years upwards) . . . . . 1000 fr. Children of both sexes (from 9 to 15 and persons above 70 . 500 fr.	Full compensation	Full compensation	Full compensation
Permanent disablement with grant for illness up to 90 days	Men and widows heads of families . . . . . 2500 fr. Adult women, children and aged persons . . . . . 1200 fr.	Full compensation	Permanent disablement below 11% excluded from compensation	Permanent disablement below 21% excluded from compensation
	Men and widows heads of families . . . . . 1 fr. Adult women, children and aged persons . . . . . 0.50 fr. per day		Excluded	Excluded
Temporary disablement	Men and widows heads of families . . . . . 1 fr. Adult women, children and aged persons . . . . . 0,50 fr. per day	Exemption from work (relative) for 5 days	Exemption from work (absolute) for 20 days	Excluded
Civil responsability	With a maximum of 3000 fr. for each person injured and of 20,000 fr. for a collective disaster.	Included	Included	Included

Insurance premiums are calculated according to fixed rates per unit of measurement of area according to the nature of the crop, the contracting parties being thus completely exempted from the obligation of keeping wage books and registers.

We now give the table of tariffs of premiums prepared by the National Accidents Bank and sanctioned as an experiment by the above mentioned decreee.

TABLE III. — *Tariff for agricultural areas.*

(*Premium per hectare for the insurance of those cultivating the under mentioned crops.*)

	Insurance with compensations		
	Maximum	Medium	Minimum
	Francs	Francs	Francs
1. Field and Pastures:			
(*a*) with special risks (irrigated, artificial, or natural meadows, mowed by means of machinery worked by animals, wooded meadows, meadows with special risks derived from the locality, from transport, etc.; pastures for cattle raising)	0.95	0.75	0.50
(*b*) without special risks	0.65	0.50	0.30
2. Wheat and similar crops (rye, barley, oats, etc.)	1.50	1.20	0.75
3. Maize (all varieties) and similar crops (buckwheat, millet, panicum, etc.)	2.20	1.75	1.10
4. Rice	1.80	1.45	0.90
5. Market gardening (root and green vegetables), industrial herbaceous plants for oil making, dyeing, etc.	1.70	1.35	0.85
6. Floriculture and gardening:			
(*a*) in part wooded to considerable extent.	1.80	1.45	0.90
(*b*) in part slightly wooded.	1.50	1.20	0.75
7. Textile plants (hemp, flax, cotton)	3.00	2.40	1.50
8. Vineyards:			
(*a*) with special risks (hill or mountain vineyards, stocks much split, on trellises, supported on growing trees, with a wood to supply the vineyard with timber, producing wine, etc.).	4.00	3.20	2.00
(*b*) without special risks	3.00	2.40	1.50
9. Olive plantations, orchards, mulberry plantations	3.50	2.80	1.75
10. Orange-groves, lemon-groves, etc.	6.00	4.80	3.00
11. Woods (felling excluded):			
(*a*) with high trees.	2.50	2.00	1.25
(*b*) ready for felling.	1.50	1.20	0.75
12. Crops in rotation:			
(*a*) with special risks (prevalence of highly taxed crops, or intensive, or part planted with trees, etc.	1.80	1.45	0.90
(*b*) without special risks	1.30	1.05	0.65
(*c*) land without distinction of crops	1.60	1.30	0.80
Lowest annual premium	15.00	10.00	5.00

Thus for insurance for a maximum compensation the premiums range from a minimum of 0.65 fr. to a maximum of 6 fr. per hectare, with an average of 2.23 fr. ; for insurance for a medium compensation a minimum of 0.50 fr. and a maximum of 4.90 fr. ; and lastly for insurance for a minimum compensation, the premium is from 0.30 fr. to 3 fr. with an average of 1.12 fr. per hectare. And to facilitate the insurance of small farms the minimum premiums are very small being respectively 15 fr. and 5 fr.

These are in short the rules for the new type of contract of insurance against accidents in agriculture adopted by the National Bank. They are clear and simple so as to ensure the success of the experiment till the system promised by the government shall come into force.

Part III : Credit

MISCELLANEOUS INFORMATION RELATING TO CREDIT IN VARIOUS COUNTRIES.

ARGENTINE REPUBLIC.

THE WORK OF THE ARGENTINE MORTGAGE BANK IN 1914. — The year 1914 was unquestionably an exceedingly trying one for the Argentine Republic. The economic condition of the country, already weakened by several years of bad harvest, was aggravated during the first half-year of 1914 in consequence of a series of atmospheric disturbances whereby the harvest, which had been expected to be exceptionally abundant, was seriously diminished ; and when, a little later, the European conflagration broke out, a financial and commercial crisis took place, and since, as we have said, the economic strength of the country was already impaired, it assumed serious proportions. Credit becoming restricted and the exchange on Europe unfavourable many failures took place and it became extremely difficult, if not impossible, to recover the rents of houses and farms.

This serious crisis, which continued throughout the whole of the year 1914, only began to grow less acute when the first returns from the harvest of 1915 came in.

Such a situation could not fail to affect unfavourably the Argentine Mortgage Bank, and similar institutions. In the first place there were considerable delays in the payment to the Bank of the interest due on its mortgage investments made through the Mortgage Credit Bank. The money of which the payment was thus delayed, comprised 587,705 frs. interest due in respect of 1913 and 1914 and 390,187 frs. interest in respect of 1915, which had also become due, since the interest on the loans in question is payable half-yearly and in advance. It must further be taken into account that the Bank had obtained credit from other Banks for

large sums, which did not, however, exceed its own uncalled share capital. Now, on account of the exceptional circumstances, these credits have been in fact called in, and though, in virtue of certain Government decrees, repayment is being postponed to a date still unfixed, the Bank is obliged to make efforts to pay back these unsecured loans out of its receipts, devoting to this purpose all the funds available.

If we compare the Profit and Loss Account of the Argentine Mortgage Bank during the years 1913 and 1914 we find the following figures : Credits 2,726,185 frs. in 1913 as against 2,586,173 frs. in 1914 ; Debits : 1,969,463 frs. as against 1,977,135 frs. respectively. Adding the profits of these two years to the opening balance, in each case it results that the closing balances of the years 1913 and 1914 were respectively 806,393 frs. and 661,956 frs. We may note that the decrease in the assets in 1914 is chiefly due to the fact that the Mortgage Credit Bank, the shares of which are almost all held by the Argentine Mortgage Bank, has paid no dividend.

Owing to these circumstances the Mortgage Bank did not pay any dividend (in 1913 it paid 12 fr. 50 per share and 2 fr. 50 per founder's share) but carried the whole of the profits to the reserve.

Lastly we shall note that at the end the year 1914 the share capital of the Bank amounted to 12,500,000 frs ; the bonds to 25,000,000 frs ; the legal reserve to 100,796 frs. and the special reserve to 575,000 frs.

The outstanding mortgage loans amounted to 36,952,590 frs. as against 36,529,709 frs in 1913.

(From the *Revue économique et financière de Paris*).

DENMARK.

THE POSITION OF DANISH LAND CREDIT ASSOCIATIONS IN 1915. — In our issue of April 1911 we published an article giving details of the organisation of rural land credit in Denmark ; in January 1913 appeared another on the work of these associations in 1911-12, and in February 1914 a similar one for 1912-13. We now possess information which enables us to draw up statistics for 1914-15. To facilitate study we present two tables. The first table contains statistics as to land credit associations which lend money only on first mortgages ; the second refers to mortgage associations which on the contrary were founded with the express object of lending money at low interest on second mortages (see article above mentioned, April 1911). We remind our readers that all the associations are based on the co-operative principle of mutual unlimited liability.

The following table shows that the total amount of first mortgage loans granted by the 14 associations rose at the beginning of 1915 to 1,859 millions of crowns, 361 millions more than in 1910. As many associations

make no distinction between urban and rural loans we cannot give exact information as to the rural land debt, but it is calculated at about half the total sum. (See the *Bulletin* of June 1914, page 67).

The mortgage associations on the other hand are distinctly divided into two groups as seen in the following table.

Lastly the Mortgage Bank of the Kingdom of Denmark on the 31st. August, 1912 contracted a new loan of 15 millions of francs (10,800,000 crowns) which enabled it to purchase at the treasury loans made by the State to small farmers (*Jordlodder til Landarbejdere*). On the 31st. March, 1914 the Bank held bonds of land credit associations to the amount of 33,297,000 crowns, and bonds of the *Jordloddes til Landarbejdere* for 15,505,000 crowns.

TABLE I. — *Situation of the Land Credit Associations at the end of the Financial Year* 1914-15.

Associations	Number of Mort-gages	Original Mortgages	Mortgages Outstanding	Reserve Fund	Date on which the Financial Year ends	Year of Found-ation
		Crowns	Crowns	Crowns		
Den danske Landmandsbanks Hypotekafdeling (Mortgage Division of the Danish Farmers' Bank) . . .	1,525	—	19,576,412	—	31-12-1914	1872
Kreditkassen for Huse erne i Köbenhavn (Copenhagen Householders' Credit Society)	1,800	107,072,987	105,772,130	6,640,902	10-3-1915	1797
Kreditforeningen af Grundejere i de danske Östifter (Credit Association of Proprietors in the Dioceses of the Danish Islands)	42,159	556,742,600	502,205,595	16,681,085	31-3-1915	1851
Kreditkassen for Landejendomme i Östifterne (Credit Association for Rural Landed Property in the Dioceses of the Islands)	12,622	152,717 200	142,339,700	4,011,262	31-3-1915	1866
Kreditforeningen af Grundejere i Funs Stift (Credit Association of the Landed Proprietor in the Dioceses of Fyen)	6,888	51,484,800	47,728,374	1,340,502	31-3-1915	1880
Kreditf. af Ejere af Mindre Ejend. paa Landet i Östifterne (Credit Association of the Peasant Farmers of the Dioceses of the Islands) . .	29,520	44,811,900	39,660,159	2,121,836	31-3-1915	1880
Kreditf. au Grundejere i Kjöbenhavn og Omegn (Credit Association of the Landowners of Copenhagen and Environs)	2,662	161,189,100	149,643,120	7,307,348	31-12-1914	1851
Kreditf. for industrielle Ejendomme (Credit Association for Industrial Landed Properties).	620	9,765,400	9,208,772	983,197	31-3-1915	1897
Kreditf. af jydske Landejendombesiddere (Jutland Rural Landowners' Credit Association).	45,390	437,933,500	412,802,918	28,522,459	31-3-1915	1851
Den vest-og sönder jydske Kreditf. af Landejendomsbesiddere (Credit Association of West and South Jutland Landowners)	18,794	165,159,900	153,873,791	8,506,149	31-12-1914	1860
Kreditf. af Köbstadgrundejere i Nörrejvlland (North Jutland Town Landowners' Credit Association) .	17	79,200	13,688	274	28-2-1915	1852
Ny jydske Köbstadkreditforening (New Credit Association of the Towns of Jutland)	11,241	125,853,300	117,370,084	6,785,948	31-3-1915	1868
Kreditf. af Fiere af mindre Ejendomme paa Landet i Jylland (Jutland Peasant Farmers' Credit Association)	77,781	139,438,900	125,169,617	5,564,776	31-3-1915	1880
Kreditf. af Grundejere paa Landet i Jylland (Jutland Country Landowners Credit Association)	5,173	36,531,000	33,645,303	1,562,893	31-3-1915	1893
Total . . . 1915	256,992	—	1,859,009,663	80,028,631		
Total . . . 1914	252,124	—	1,806,248,479	74,135,433		

TABLE II. — *Situation of the Mortgage Associations in* 1914-15.

Associations	Number of Mortgages	Original Mortgages	Mortgages Outstanding	Reserve Fund	Date on which the Financial Year ends	Year of Foundation
		Crowns	Crowns	Crowns		
Essentially Urban Mortgage Associations.						
Hypotekforeningen for Kjöbenhavn og Omegn (Mortgage Association for Copenhagen and Environs) . .	2,549	44,379,800	43,699,490	1,769,054	31-3-1915	1895
Grundejernes Hypotekforening (Landowners' Mortgage Association) . .	1.062	17,277,700	16,811,850	524,756	31-3-1915	1905
Hypotekforeningen for Aalborg (Aalborg Mortgage Association) . . .	592	3,893,000	3,072,543	163,668	31-3-1915	1895
Hypotekforeningen for Aarhus (Aarhus Mortgage Association)	1,099	10,157,900	6,770,492	287,540	31-3-1915	1895
Jydsk Hypotekforening (Jutland Mortgage Association)	4,013	20,827,200	18,380,324	971,933	31-3-1915	1899
Östifternes Hypotekforening (Mortgage Association for the Dioceses of the Islands)	4,560	18,415.600	16,411,700	908,337	31-3-1915	1901
Total . . . 1915	13,875	114,951,200	105,146,399	4,625,288		
Total . . . 1914	13,259	106,102,900	98,054 312	4,040,054		
Essentially Rural Mortgage Associations.						
Jydsk Land-Hypotekforening (Jutland Rural Mortgage Association) . . .	5,741	11,453,600	10,822,487	697,351	31-3-1915	1906
Östifternes Land-Hypotekforeningen (Rural Mortgage Association of the Dioceses of the Islands)	1,725	7,691,100	6,875,132	421,928	31-3-1915	1906
Husmands-Hypotekforeningen (Mortgage Association of Peasant Farmers)	5,455	4,851,600	4,566,991	175,713	31-3-1915	1907
Total . . . 1915	12.921	23,996,300	32,264,610	1,295,042		
Total . . . 1914	12,863	22,756,500	21,287,223	1,107,277		

FRANCE.

1. — LOANS FROM THE NATIONAL PENSION FUND TO SOCIETIES FOR THE PROVISION OF CHEAP DWELLING HOUSES AND TO SOCIETIES LENDING ON REAL ESTATE IN 1914. — The National Pension Fund, in the course of 1914, granted to societies for the provision of cheap dwelling houses, six loans to a total value of 1,471,000 francs, out of the fund for pensions to artisans and labourers.

The ten loans previously granted amounted to 2,684,000 francs, so

that the whole sum advanced from this pension fund amounted on the 31st. December, 1914, to 4,155,000 francs.

Of this amount 1,247,000 francs were actually paid out, of which 722,000 francs relate to 1914.

Sinking-fund repayments amounted to 6,000 francs so that the sum remaining due on the 31st. December, 1914, was 1,241,000 francs.

The loans made by the National Pension Fund on Government account to real estate credit companies and societies for the provision of cheap dwelling houses were 53 in number, and amounted to 11,505,000 francs, that is, a diminution of five loans and 4,008,005 francs as compared with 1913, owing to the fact that since the outbreak of the war no new credit has been opened.

The loans previously made amounting to 22,432,500 francs, the total sum on the 31st December, 1914, was 33,937,500 francs. From this sum, however, must be deducted 1,870,100 francs, annulled as not having been called for within a year from the date when the loans were granted, and the net amount of the advances placed at the disposal of the societies to carry on their credit transactions was on the 31st. December, 1914, 32,067,400 francs.

Of this amount the sum actually drawn which on the 31st. December, 1913, was 11,736,000 francs was increased in the course of the year 1914 by 8,055,000 francs, after the deduction of 50,200 francs not drawn by the societies, which therefore reverted to the Treasury. On the 31st. December, 1914, the sums paid out amounted to 19,791,000 francs.

* *

2. — LOANS GRANTED BY THE DEPOSIT AND CONSIGNMENT OFFICE IN FAVOUR OF CHEAP DWELLING HOUSES IN 1914. — Since the outbreak of hostilities the Deposit Office has suspended the consideration of new applications for loans, but has continued as far as regards applications which have been approved to place at the disposal of the societies the sums necessary for the completion of their work. The position of these loans is as follows :

In 1914, forty building societies received forty-three loans amounting to 2,538,300 francs, *i.e.*, as compared with 1913, a diminution of ten in the number of loans and of 1,053,700 francs in the amount involved. The loans previously granted to building societies amounted to 23,511,200 francs. Apart from these loans the amount advanced to the Credit Society was 4,999,900 francs, so that the total amount of advances made in favour of the provision of cheap dwelling houses rose on the 31st. December, 1914, to 31,049,400 francs.

Of this sum 27,698,500 francs in all have been paid out, of which sum 2,652,900 francs were paid out in 1914.

The sinking-fund repayments having reached a total of 5,665,650 francs, of which 1,148,750 francs in 1914, the amount remaining due is 22,032,850 francs.

ITALY.

RECENT PROVISIONS FOR LAND CREDIT. — A Viceregal Decree, dated September 26th., (No. 1,433), published in the *Gazzetta Ufficiale del Regno d'Italia* of 29th. September (No. 240), contains important provisions for the encouragement of land credit and the cultivation of farms, with special reference to the Southern provinces. It first of all lays it down that for the purposes of the renewal of loans against bills and other paper and the extension of the legal preference granted in accordance with Sec. 2 of the Viceregal-Decree of June 17th., 1915., No. 961 (1), the crop is considered to have "failed," when it is insufficient to cover the expense of production. The "failure" is recognised for districts of uniform agricultural character and for particular crops. In case of a difference of opinion arising between the lending Institute and the debtors, the failure of the crop is declared by the prefect of the province in accordance with the technical advice of experts. No appeal is, however, allowed against the declaration of failure of the crop or refusal to declare such failure for the purposes of land credit. And the declaration is without validity for the decisions of the financial authorities in fiscal matters.

When on account of the debit balance of the previous years' accounts, the estimated productive power of the farms does not offer sufficient guarantee for a new loan, proprietors directly cultivating their farms, may, up to December 31st., 1915, ask for the opening of a current account on mortgage for working capital for the new agricultural year ; and managers of farms for others, in the same condition, may apply for additional working capital on the security of their live and dead stock including the agricultural machinery. The current account secured on mortgage may not be opened for a period of more than three years, that in favour of the tenant farmer, or métayer, not for a period exceeding the term of lease, or métairie, running at the moment in which the account is opened, nor in any case for a period of more than three years. On expiration of the period, there can be no renewal. Deeds and documents of whatever nature needed for the opening of the current account on mortgage are exempt from all stamp, registration and mortgage dues.

The intermediary organizations for the grant of land credit have power, independently of any provision in their rules, to distribute seeds on condition of their doing so at cost price.

The above decree further provides that the special provisions for Sardinia and Sicily in the law of July 15th., 1906, Sections 10, 11, 12 and 15,

(1) Important provisions in behalf of land credit had already been recently issued in Italy by Royal Decree of October 11th., 1914, No. 1,089 and viceregal decree of June 17th., 1915, No. 961. See *Bulletin of Economic and Social Intelligence*, for January and October 1915.

in regard to the supply to the peasant by the lessor of the seeds, provisions and amounts necessary for the good working of the farm and also the assistance necessary to enable him to live until the date of the new harvest, shall be applicable for the farming year 1915-1916, even if the conditions indicated in Section 13 of the law in question (that is, that the peasant himself works the farm and that it is cultivated with wheat or other cereals or vegetables and has an area in proportion to the working capacity of a family), are not fulfilled, provided the farm let or sublet has an area of not more than ten hectares, in case it is cultivated with cereals, and not more than five hectares when otherwise cultivated. Finally the owner of a farm whose land has been entirely or partly relieved from the burden of the land tax (1), must, when the land thus relieved from taxation is leased, relieve the tenant of a corresponding portion of the rent. When the farm is leased to a tenant paying rent partly in kind, the proprietor must let the tenant share in the benefit obtained in a proportion corresponding with his share of the produce according to contract.

Another special provision for land credit was made in the law published by Decree of September 15th., 1915, No. 1,373 (2), in favour of Sardinia, that is to say, on the estimates of the Department of Agriculture, for the year 1915-16, an amount of 1,000,000 frs. has been placed for the benefit of the *Casse ademprivili* of Sardinia, for land credit and improvements, to be distributed in the proportion of 600,000 frs. for the Cagliari Bank and 400,000 frs. for the Sassari Bank.

JAPAN.

WORK OF THE JAPANESE MORTGAGE BANKS. — Twice already we have dealt in this Bulletin with the Mortgage Bank of Japan (in our numbers for January and April, 1913), describing its organisation and working and informing our readers of the results attained. The last balance sheet of this Institution was made out for the year ending June 30th., 1915. We place it before our readers, who will not fail to observe the remarkable progress made since 1912, the date of the last balance sheet we have reproduced.

(1) In accordance with Royal Decree of June 10th., 1817, for the Neapolitan Provinces and Royal Decree of August 8th., 1833, for Sicily.

(2) See *Gazzetta Ufficiale del Regno d'Italia*, Rome, No. 231, September 17th., 1915.

Credit (in Yens).		*Debit* (in Yens).	
Paid up Capital	15,000,000,000	Share Capital	40,000,000,000
Loans Repayable in Instalments	70,841,297,651	Reserve Fund	5,092,400,000
Loans Secured on Bonds of Agricultural and Industrial Banks	144,610,037,530	Unclamed Dividends	12,494,810
Loans for Fixed Periods	3,569,253,120	Land Bonds in Circulation	192,582,780,000
Agricultural and Industrial Bank Bonds	361,248,000	Converted Bonds	17,508,355,000
Short Term Loans	15,000,000	Deposits on Current Account	4,835,931,087
Discounted Bills	1,006,016,000	Loans from other Banks	104,959,980
Deposits in the Deposit Bank	21,716,640,000	Unclaimed Interest on Bonds and Redeemable Bonds	2,775,542,660
Deposits in other Institutes and in Postal Savings Banks	5,680,291,767	Unclaimed Interest on Deposits and Matured Deposits	582,477,810
Public Debt Securities	905,978,500	Reserve Fund for Redemption of Bonds	818,358,570
Plus-value of Securities	737,885,900	Reserve Fund for Repayment of Deposits	124,842,000
Agencies' accounts	1,497,228,279	Temporary Collections	157,246,305
Office Buildings and Furniture	69,069,000	Brought Forward from Previous account	109,165,598
Real Estate	196,966,150	Profit	1,781,359,954
Payments on account of Third Parties	162,436,179		
Cash in Hand	116,565,698		
Total	266,485,913,774	Total	266,485,913,774

RUMANIA.

TRANSACTIONS OF THE RURAL BANK OF RUMANIA IN 1914. — The Board of Directors of the Rural Bank of Rumania have published a report on the transactions of this institution during 1914. Generally speaking, in 1914, the work of the bank could not be developed as was desired because of the economic difficulties of the country.

The total area of land bought during the year was 8,435 hectares, of which 2,113 hectares have been distributed in holdings to the peasants. If these figures seem small the explanation must be sought in this period of stagnation and persistent crisis, during which an issue of bills to satisfy the sellers was not possible, nor could any considerable sums in cash be demanded from the peasants since their means were too limited.

The area of land bought by the Bank from its foundation until the end of December, 1914, is 123,902 hectares, of which 17,930 hectares have been

allotted to peasants; 10,796 have been reserved as common pasture land; and 18,928 hectares of forest land have been handed over to the State The Rural Bank holds therefore at the present time a reserve of more than 76,000 hectares, of which approximately 9,000 are forest, and the remainder cultivable ground worked by the peasants, with the exception of 7,000 hectares of which the contracts are not yet expired or cancelled. It appears, then, from data supplied by the technical staff, that of the area still in hand as already mentioned, 2,481,266.21 *ares* have been allotted and are ready for distribution as soon as the economic conditions of the country improve and facilitate the making of the deposits required by the law. The remaining lands should have been distributed in lots in 1915.

The general balance sheet shows, for 1914, a balance of 127,841,946.77 *lei* against 110,678,474.74 in 1913 and 27,047,294.35 in 1909, the first year of the Bank's existence. The profit and loss account shows a net profit of 721,201.67 *lei* in 1914, which is 269,248.93 *lei* less than in 1913. On account of the present exceptional circumstances the Board of Directors proposed that the profit realised should not be distributed immediately to the shareholders, but that the 30 per cent. due to the reserve fund should be deducted and the remainder carried to 1915. Thus the Bank will have an easily available capital should conditions in the country become aggravated.

We come now to the detailed trnsactions of the Bank. The improvements in cultivation on the lands being worked *ad interim* have been pushed forward with the same persistence as before. The area under cultivation in 1914 was 34,200 hectares, of which wheat formed 20.59 %, maize 48.34 %, barley 8.86 %, oats 7,23 %, against 22,579 hectares in 1913 of which wheat was 21 %, maize 50.50 %, barley 11 %, oats 7.50 %. The remaining crops were peas, kidney-beans, lucerne, fodder crops and various others.

The data show the variety of the crops and an increasing tendency towards their more rational rotation. The Bank continues to exercise supervision over the labours of the villagers by its different agencies, not only on the land under temporary cultivation but also on the lots sold to the villagers. The total value of agricultural machinery in use is 338,283 *lei*. A part of this machinery (55,258.50 *lei*) was bought by the Bank and placed gratuitously at the disposal of the peasant cultivators of the lands farmed individually. The remainder, to the value of 283,085,29 *lei*, has been purchased by the peasant cultivators through their own associations and agricultural co-operative societies. In 1913 there were 25 agricultural co-operative societies; in 1914 this number was increased by eight, and the total amount of their subscribed capital was 238,960 *lei*, and of paid-up capital 60,049.14 *lei*. Thirty-four of the holdings have sold their produce in common, comprising: wheat 310 wagons, peas 104 wagons, barley 210, oats 122, sugar-beet 46, fodder 17, kidney-beans 13, rye 6.

The Rural Bank, as it has always done in the past, seeks by offer-

ing prizes to encourage better cultivation and better rearing of cattle. The total amount given in prizes this year was 2,077 *lei*.

The insurance of crops against hail, begun in 1912, covered 20,344 hectares, as against 16,047 in 1913, and 11,157 in 1912; for the area insured in 1914 the total value of the premiums paid was 72,970 *lei*, and that of the claims paid was 29,096.05 *lei*, leaving a balance of 43,874 *lei*. The balance of the last three years together was 97,318.48 *lei*.

The selection of the chief plants for cultivation being one of the most important factors in agricultural progress, the Rural Bank began in 1912 to promote improvements in cultivation. For this purpose three experiment stations have already been established, in the districts of Jassi, Neamtzu and Ilfov. The improvements consist for the most part in the planting of acacias from the nurseries of the Rural Bank in banks and on sand for purposes of protection. The total area wooded up to the present time is about 220 hectares.

The total area of communal pasturage formed by the Rural Bank on land purchased in the course of 1914 is 2,007 hectares.

It is interesting to know that from October 1st., 1908, to December 31st, 1914, the Rural Bank bought 104 tracts of land (15 in 1914) having a total area of 123,903.54 hectares, of which 95,927 hectares were capable of cultivation and 27,976 hectares were forest land, at a total cost of 84,187,491.70 *lei*.

As may be seen from the above statements the efforts of the Rural Bank to promote the economic and agricultural betterment of the people on its holdings, efforts which form the chief activity of this institution, have continued without interruption in spite of all difficulties.

URUGUAY.

THE POSITION OF THE "CRÉDITO TERRITORIAL DEL URUGUAY" IN 1914. — On the 31st. December, 1914 the total amount of the outstanding mortgage loans of this company was 8,695,895 frs. against 9,207,695 frs. in 1913, showing a diminution of about 512,000 frs. On the other hand, the funds at the disposal of the society had risen from 149,000 frs. in 1913 to 478,893 frs. in 1914, an increase of 330,000 frs., not including about 167,000 frs. not yet repaid in consequence of the crisis having caused delay in certain payments, which, however, were securely guaranteed.

Th net profits of the *Crédito Territorial del Uruguay* show a diminution in 1914 of 39,951 frs. This is explained chiefly by the fact that under the present circumstances the company has been compelled to withdraw a part of its capital from transactions in which it was engaged to meet expenses, a measure recommended by prudence.

Uruguay, like all the countries of Latin America in a greater or less degree, has been suffering from a crisis since the outbreak of the European

war. One of the first precautions taken was the moratorium, which explains the delay in payments above referred to.

The existing circumstances clearly imposed on the company a prudent attitude of delay as well as a diminution in the extent of its transactions. It was also necessary to keep available sufficient funds to provide for any demands for the withdrawal of the deposits, which in round numbers amounted to 150,000 fr. Notwithstanding this the diminution of profits was, as we have seen, less than 40,000 frs. The amount of the bills held has diminished by 2 %. The dividend has been fixed at 5% as in 1913, that is 12 frs. 50 per share ; the amount of the dividends paid is 250,000 frs.

At the close of the year 1914 the share capital of the *Crédito Territorial del Uruguay* was 5,000,000 frs., the bonds amounted to 4,246,000 frs. the legal reserve to 43,375 frs. and the special reserve to 50,000 frs.

(From the *Revue économique et financière*, of Paris).

Part IV: Miscellaneous

AUSTRALIA.

LAND SETTLEMENT IN VICTORIA. (1)

SOURCES (OFFICIAL):

OFFICIAL YEAR BOOK OF THE COMMONWEALTH OF AUSTRALIA. Statistics for the Period 1901-1913. Melbourne. Printed by Authority.
VICTORIAN YEAR BOOK 1912-13. Melbourne. Printed by Authority.
STATISTICAL REGISTER OF THE STATE OF VICTORIA 1912. Melbourne. Printed by Authority.
VICTORIA, THE GARDEN STATE OF AUSTRALIA. A Handbook issued by Authority of the Government of Victoria. Melbourne, 1909.

§ 1. GENERAL INFORMATION.

The colony of Victoria (denominated an "Original State" in the Act of 1900 constituting the Commonwealth of Australia) was formerly known as the District of Port Philip and was then administered by the Government of New South Wales. It was proclaimed a separate colony in 1851, and in 1855 was granted responsible self-government. It occupies an area of 87,884 square miles in the extreme south-east of the continent and has a population (Census of 1911) of 1,315,551, of whom 98 per cent. are British subjects. Among the inhabitants are 5,600 Chinese and 640 aborigines. Victoria is the

(1) A general article on Land Settlement in Australia was published in the *Bulletin* of March, 1913, and an article dealing with Land Settlement in New South Wales appeared in our issue for August of the same year. It was intended that the article relating to New South Wales should be followed at short intervals by articles dealing with Land Settlement in each of the other states of the Commonwealth, but the series was unavoidably interrupted. We return to the subject with the present article.

penultimate in size of the Australian States, Tasmania being the smallest, but ranks second only to New South Wales in population, wealth, and political and commercial importance. The ratio of population to area gives a density of population of 15 persons to the square mile, the density for the whole of Australia being 1.62. To furnish the means of comparison it may be mentioned that the number of persons per square mile is in Canada 1.93, in New Zealand 10.47, in the United States 30.93, and in Great Britain and Ireland 376. The distribution of population in Victoria is disturbed by the fact that nearly one-half of the total population is concentrated in the city of Melbourne.

The wealth of the State is chiefly, but by no means exclusively, pastoral, agricultural and mining. The estimated value of the products of agriculture and the extractive industries in 1913 was £31,000,000, while the value of the production of manufactures, defined as the added value conferred on primary products by the process of manufacture, was estimated to be £18,000,000. The chief exports, in order of value for the year 1912, are wool (£6,990,000), gold and bullion (£2,877,000), wheat (£1,836,000), butter (£1,545,000), skins and hides, mutton, and flour. The manufactures are practically for home consumption only. Gold was discovered in Victoria in 1851 and its production has contributed in no small degree to the prosperity of the State, which, up to the end of 1912, had produced about half of the total quantity recorded for the whole of Australia. Wool, however, far outranks gold in the wealth of the State. The Victorian flocks have been built up from original importations of Tasmanian stock. The first official return of sheep in the State was in 1836, when the number was 41,332. In 1907-8 the number was 14,146,000, but drought in that year reduced the flocks considerably. Conditions in the following years were favourable, and in 1912 the number which had fallen to 12,545,000 had risen to 13,857,000.

It is claimed that Victoria has a climate more suited to Europeans than any other State in the Commonwealth. Without doubt the climate is pleasant and at the same time favourable to stock-breeding and agriculture. The average rainfall of 25.5 inches is about the same as that of the British Isles. The leading crops are wheat, oats, barley, hay and potatoes. Vines grow well in certain localities and there is a small annual crop of tobacco. As has already been noted, however, Victoria's wealth is pastoral rather than agricultural. Crown lands suitable for agriculture and grazing, — excluding that it is to say, pastoral areas, — are classified according to quality. The small amount of first-class land still available for settlement is situated for the most part in the single country of Buln Buln in the Gippsland district. Lands of the second class, which are often of value chiefly for grazing, are distributed fairly evenly throughout the State, as are also third-class lands, an enormous area of which is still open to settlers. In addition to these lands already classified there is a vast extent of land still open to occupation in the so-called "Mallee country" in the north-west corner of the State. The light sandy soil of this district is covered with mallee scrub — a dwarf species of eucalyptus — but it has now been made possible to clear the scrub at a

moderate cost and with the extension of railway communication this portion of the State is rapidly being brought under cultivation.

§ 2. Land settlement legislation and administration.

Until the year 1860, land settlement in Victoria was regulated first directly by the Imperial Government and later on by Orders in Council of the Government of New South Wales made under Imperial Acts of 1842 and 1846. The District of Port Philip, which was later to become the colony of Victoria, was thrown open to settlers in September, 1836, and the first land sales, which were by auction, were held in June, 1837. The upset price was 5*s.* an acre. This was raised in 1839 to 12*s.* an acre throughout the whole of New South Wales, and in 1841 to 20*s.* an acre in the Port Philip district only.

In 1842 direct legislation was superseded by regulations issued by the Government of New South Wales. Land was to be sold by auction, after survey, at an upset price throughout the colony of 20*s.* an acre. It was provided that half of the net proceeds were to be devoted to defraying the cost of immigration of suitable persons to the colony. (1) Further regulations were issued in 1847 putting into force the provisions of the *Waste Lands Act* of 1846. A new classification of Crown lands was introduced, the whole territory being divided into: (*a*) *settled districts*, including the nineteen original counties of New South Wales and the land immediately round the settlements at Moreton Bay and Melbourne; (*b*) *intermediate districts*, comprising a belt of land from 50 to 200 miles inland beyond the limits of the settled districts; and (*c*) *unsettled districts*, including all other land extending to the extreme limits of the colony. The system of sale by auction was continued but was supplemented by a system of leasing blocks of land for various terms for pastoral purposes only. During the currency of such a lease the lessee could at any time purchase the freehold at the upset price of £1 per acre, and at its termination he had the right of pre-emption at the same price over the whole or any part of the land.

The regulations referred to above were superseded in 1860 by an act passed by the Victoria Government. Land classified as *country land* was offered for settlement in allotments of from 40 to 60 acres. Applications had to be accompanied by a deposit of £1 an acre, and a successful applicant had the option of purchasing the whole allotment outright, or purchasing one half of it and renting the other half at the rate of one shilling per acre, with the right of purchase at any time throughout the term for which he held it. *Special lands*, which were those with the advantage of situation near towns, rivers or railways, were sold quarterly at auction.

(1) "Assisted" immigration into Victoria practically ceased in 1873, but the State has recently turned again to the practice. In 1912 the number of immigrants assisted was 15,112.

The act of 1860 was followed by one in 1862 which introduced the principle of selection before survey. The settler was allowed to select agricultural land within certain large areas at a uniform price of £1 per acre, upon condition that he effected certain specified improvements or brought part of the land under cultivation. Pastoral lands under this act were let at a rental based on their stock-carrying capacity.

In 1869 both a *Land Act* and a *Pastoral Act* were passed, consolidating and amending all previous legislation. Under the *Land Act* the free selection of unoccupied Crown lands was continued, but the settler was required to reside upon the selected holding for the first two and a half years, fence it, and cultivate a certain proportion. Moreover, for the first three years he only held the land under a lease at a rent of 2*s*. an acre. At the expiration of three years, provided that all conditions had been fulfilled, he could either purchase the land or renew the lease for a further period of seven years, with the option of purchase. All sums paid as rent were to be counted towards the purchase price in the event of the occupier acquiring the freehold. The *Land Act* of 1869 was amended in 1878 when the preliminary period of lease was increased to six years and the period of residence to five years. In other ways the conditions were made more onerous and the result was a considerable falling off in the area of Crown land taken up year by year.

The present system of land settlement in Victoria, which we shall presently examine in detail, really dates from the *Land Act* of 1890 which consolidated the provisions of two earlier acts, the *Land Act* 1884 and the *Mallee Pastoral Leases Act* 1883.

The act of 1890 was amended by *Land Acts* of 1891, 1898, 1900 (two acts), by the *Settlement on Lands Act* 1893 and the *Mallee Lands Act* 1896. These were all consolidated into the *Land Act* 1901 which, in turn, has been amended by acts of 1903, 1905, 1909 and 1911. The *Land Act* 1898 introduced a system of Government purchase of private land for closer settlement. We shall deal with closer settlement operations in a separate section.

§ 3. Existing tenures.

Apart from closer settlement schemes and mining leases, the tenures under which Crown lands may be alienated or occupied in Victoria may be grouped thus: (1) *Free grant*, (2) *Sales by auction and Special sales*, (3) *Conditional purchase and* (4) *Leases and licences.*

(1) *Free grant.* — This is the original and was for a time the only way in which land could be acquired in Australia. Free grants to individuals were virtually abolished before Victoria was proclaimed open to settlement, but the Governor (under Section 10 of the *Land Act* 1901) has power to reserve Crown lands, either temporarily or permanently, from sale, lease or licence, and dedicate such lands to public purposes. Reservation is the usual preliminary to the issue of a free grant. The grants are made for railway extension, for the purpose of securing a water supply to towns, for

recreation-grounds, for open spaces for camping and watering stock, for schools and universities, and so on. The area affected in any one year is small and the purposes for which free grants are now made have for us no particular interest. We pass on, therefore, to:

(2) *Sales by auction and Special sales.* — Lands within certain areas specified in a schedule attached to the *Land Act* 1901, and land within the limits of any town, city or borough may be sold by auction, up to a limit of 100,000 acres in any one year, at an upset price of £1 an acre or any higher price which may be determined. The purchaser must pay the survey charges at the time of the sale and deposit 12 ½ per cent. of the price. The balance, with interest at 4 per cent. per annum, is payable in half-yearly instalments not exceeding forty in number. Auction sales must be notified in due time in the *Government Gazette* and stringent provisions are in force to prevent agreements which would eliminate competition at such sales.

Detached strips of land not exceeding twenty acres in area may be sold at a valuation, by *Special sale* without competition, to the owner of the adjoining freehold.

The amount of land disposed of by auction or special sale is relatively small and apparently decreasing. The particulars for the five years 1908 to 1912 are as follows:

TABLE I. — *Auction and Special Sales* 1908 *to* 1912.

Particulars	1908	1909	1910	1911	1912
	Acres	Acres	Acres	Acres	Acres
Country lands	2,805	2,729	2,469	1,096	1,178
Town and suburban lands . . .	1,630	2,062	1,789	1,263	1,412
Special sales	2,117	2,602	1,537	1,709	1,530
Total . . .	6,552	7,393	5,795	4,068	4,120

(3) *Conditional purchase.* — Under terms of conditional purchase a large area of Crown land is alienated annually. Under conditional purchase are included the following tenures: (a) *Agricultural and grazing allotments,* (b) *Mallee agricultural licences,* (c) *Murray Settlements leases, and* (d) *Swamp or reclaimed lands purchase leases*

An *Agricultural allotmeut* is an area of 200 acres first-class or 320 acres second-class land which may be acquired on a purchasing lease of either 20 or 40 years' tenure at a minimum price of £1 per acre for first-class and 15*s.* per acre for second-class land. A *Grazing allotment* is an area of 640 acres of third-class land which may be acquired in like manner at a

minimum price of 10s. per acre. *Mallee agricultural licences* are issued, subject to the conditions similar to those governing leases of agricultural allotments, for areas of 640, 1,000 and 1,280 acres of mallee land of first, second and third class, respectively. These conditional purchase leases are all granted either with or without the requirement of residence upon the holding. During the first six years, improvements of a certain value per acre must be effected by the occupier, and for the same length of time the lease is not negotiable, though a lien may be given upon the improvements effected. No grant to the land can be obtained until six years have elapsed, during which all the specified conditions have been fulfilled. After six years a Crown grant may be obtained at any time upon payment of the balance of the purchase price.

Under the *Murray Settlements Act* 1907, holdings denominated *Homestead allotments* and *Mallee farm allotments* may be acquired in the Mallee country. Homestead allotments are situated near the river Murray and are limited in area to a maximum of 50 acres. Mallee farm allotments, which are situated more or less remote from the river Murray, may vary according to the quality of the land from 640 to 1,600 acres. Part II of the Act provides for the construction of irrigation works and the establishment of irrigation settlements. Two small areas have been subdivided for settlement as irrigated areas while an area of 50,000 acres has been divided into dry farm allotments.

The swamp or reclaimed lands which may be acquired upon conditional purchase leases are those specified in the *Land Act* 1901 together with such other lands as may from time to time be proclaimed as swamp or reclaimed land in the *Government Gazette*. The Governor in Council has power to order the reclamation of any existing swamp land and has certain powers of compulsory expropriation of land in connection with the necessary drainage works. Swamp land is divided into lots not exceeding 160 acres and the value of each lot is provisionally determined. Under a conditional purchase tenure an occupier may acquire the freehold of his land by payment of the purchase price (with interest at 4½ per cent.) in sixty-three equal half-yearly instalments. The conditions laid down are that the purchaser shall keep open and in good repair all canals ditches and drainage works on and adjacent to the land and shall, during each of the three first years, effect permanent improvements thereon to the value of 10s. an acre.

A considerable proportion of the land taken up from year to year upon conditional purchase tenure reverts to the Crown after a few years in consequence of non-fulfilment of the conditions prescribed. The table below shows the area of land conditionally selected from 1908 to 1912 inclusive. The amount reverting to the Crown is apparently not shown in the official returns to which we have access, but the total areas alienated and in process of alienation are given in § 5 below.

TABLE II. — *Areas Purchased Conditionally* 1908 *to* 1912.

Particulars	1908	1909	1910	1911	1912
	Acres	Acres	Acres	Acres	Acres
With residence	184,942	214,999	210,331	172,599	97,766
Without residence	28,941	42,180	38,363	33,109	16,864
Total	213,883	257,179	248,694	205,708	114,630
No. of selectors	1,533	1,736	1,740	1,608	1,072

(4) *Leases and licences.* — The various leases and licences under which land may be held in Victoria, for longer or shorter terms and for different purposes, are as follows: (*a*) *Grazing area leases,* (*b*) *Perpetual leases,* (*c*) *Mallee leases,* (*d*) *Licences of auriferous land,* (*e*) *Swamp or reclaimed lands leases,* (*f*) *Grazing licences and pastoral leases,* (*g*) *Leases and licences for other than pastoral purposes,* (*h*) *State forests and timber reserves licences.*

Grazing area leases may be granted for a maximum of 200 acres first class, 640 acres second class, or 1,280 acres third class land for any term of years expiring not later than December, 1920. The lessee is required to fence the land (or effect other permanent improvements equal to the cost of fencing), to destroy vermin and keep down noxious weeds, to erect gates where necessary, and to keep all permanent improvements in good repair. The annual rent is fixed according to classification and valuation. The Crown reserves the right to take any portion of the area which may be required for railways or other public purposes and to issue licences to enter upon the land to take timber, stone, coal, etc. The Crown may also resume possession by giving two years written notice and paying compensation to the tenant for permanent improvements executed, and for disturbance. An outgoing tenant is entitled to compensation from an incoming tenant for all fences, wells, reservoirs and dams constructed during the currency of the lease.

A lessee may select, out of the area leased, an agricultural or grazing allotment for conditional purchase as already described.

Perpetual leases of agricultural and grazing land may be granted to persons entitled to take up agricultural or grazing allotments on conditional purchase tenure, but no persons may under any circumstances hold under perpetual lease more than three times the area which he would be entitled to select for conditional purchase. The lessee is required to reside on the land for at least the first five years of his lease, but the residence condition

may be waived if at least half of the area is brought under cultivation by the end of the fourth year. During the first six years of the lease the lessee may not negotiate his right, but at the end of that time he may, with the written consent of the Land Board, transfer, mortgage, sublet or part with the land.

The rent payable under a perpetual licence (except for Mallee and swamp or reclaimed land) is 4 per cent. of the unimproved value of the land. Revaluation is carried out every ten years. A lessee may terminate his tenancy at the end of any ten year period upon giving six months' previous notice. Should he elect to take up an agricultural or grazing allotment upon conditional purchase terms, the value of all permanent improvements carried out by him during his lease will be counted towards the purchase price.

Mallee lands are let on perpetual lease at a rent equal to 1 ½ per cent. of the unimproved value as estimated at ten year intervals. Swamp or reclaimed land is let either for a term of twenty-one years or on perpetual lease.

Grazing licences, renewable annually, are issued for large areas of pastoral land situated chiefly in the north-eastern part of the State. There is no limit to the area which may be held under licence, the rental varying according to the grazing value.

Leases of Crown land (for a term of not more than twenty-one years at a rent of not less than £5) may be granted for various purposes not connected with agriculture, *e.g.*, for quarrying stone, for developing mineral springs, for manufacturing salt, for the construction of bridges, ferries, quays and landing places. Annual licences are also issued to occupy land for any of these purposes.

Finally, grazing licences, residence licences and licences to cut timber are issued for lands within State forests and timber reserves.

Particulars of all Crown lands held under lease or licence are shown in the following table:

TABLE III. — *Occupation of Crown Lands under Lease or Licence* 1908 *to* 1912.

Tenure	1908	1909	1910	1911	1912
	Acres	Acres	Acres	Acres	Acres
Grazing area leases	3,183,800	3,087,173	3,006,998	2,950,226	2,869,095
Grazing licences:					
Land Act 1901 (exclusive of Mallee)	6,469,855	6.774,794	5,763,489	5,328,249	5,777,386
Mallee Lands	4,467,218	4,970,042	5,273,592	5,413,216	5,016,456
Mallee allotment leases	987,186	718,249	637,083	327,949	114,287
Perpetual leases under Mallee Lands Acts	641,219	641,837	610,693	587,350	561,214
Auriferous lands (Licences)	106,040	103,996	101,623	99,008	92,873
Pastoral leases	63,510	51,450	14,200	—	—
Perpetual leases	31,952	32,354	22,159	9,950	7,899
Swamp lands leases	4,566	4,500	4,038	4,001	3,981
Total	15,955,346	16,384,395	15,433,875	14,719,149	14,443,191

The above table does not include mining leases or leases issued under closer settlement acts. Mining leases are granted by the Department of Mines and Forests for a term of fifteen years in such areas as are designated by the Minister. The rent of land leased for gold-mining is two shillings and sixpence an acre; that of land leased for the extraction of coal and other minerals varies from one shilling to £1 an acre.

Closer settlement leases and all the operations under the closer settlement acts are dealt with below.

§ 4. CLOSER SETTLEMENT.

Provision for closer settlement was made first in the *Land Acts* of 1898 and 1901 and their amendments, and afterwards in the *Closer Settlement Act* 1904, amended in 1906, 1907, 1909, and 1911. Provision for settlement under special tenures was made in the *Settlement on Lands Act* 1893, and the *Small Improved Holdings Act* 1906, but these acts are now incorporated, the first in the *Land Acts* and the second in the *Closer Settlement Acts*.

Under the *Closer Settlement Acts*, Government is authorised to purchase, up to a limit of £500,000 per annum, privately owned land throughout

the State for subdivision into suitable allotments according to the class of land and for disposal to suitable applicants. The administration of the acts is entrusted to a specially constituted "Lands Purchase and Mangement Board" consisting of three persons appointed by the Governor-in-Council. The type of land acquired is ordinary farming land, more or less improved, or else land in irrigated districts with plentiful supplies of water. The Board may dispose of land thus acquired, or of any Crown land turned over to it for settlement, either as (*a*) *farm allotments*, (*b*) *agricultural labourers' allotments*, or (*c*) *workmen's home allotments* upon conditional purchase terms. Farm allotments must not exceed £2,500 in value, agricultural labourers' allotments must not exceed £350 in value, and workmen's home allotments must not exceed £250 in value.

Applications for holdings must be accompanied by a registration fee of 5*s*., a lease fee of £1, and a deposit equal to 3 per cent. of the capital value of the land. A conditional purchase lease is granted to the successful applicant and the purchase price is payable in sixty-three or any less number of half-yearly instalments. The lessee must reside on the allotment. He may not transfer, assign, mortgage or sublet any part of the holding during the first six years of the lease. At the end of any half year after the first twelve years he may obtain a Crown grant to the land upon payment of the balance of the purchase price.

All closer settlement leases contain conditions as to the carrying out of improvements upon the holding. The lessee of a farm allotment must carry out improvements' of a substantial and permanent nature equal to 10 per cent. of the purchase price before the end of the third year, and further improvements equal to another 10 per cent. before the end of the sixth year. In the case of agricultural labourers' allotments the improvements to be carried out are the erection of a dwelling-house of the value of at least £30 within one year from the date of the lease and the enclosure of the allotment with a substantial fence within two years. In the case of workmen's home allotments the land must be fenced and a dwelling-house of the value of £50 at least erected within one year, and additional improvements of a value of at least £25 effected within two years from the granting of the lease.

In addition to carrying out general schemes of settlement the Board has power to acquire, on behalf of an applicant, any suitable piece of land which he may have selected upon his own initiative. The applicant in this case enters into a provisional agreement with the owner for the purchase of the land, and if upon examination the Board finds that the land is adapted to closer settlement and is offered at a reasonable price, they may approve the purchase, take over the land on the terms of the provisional agreement, and allot it to the applicant under all the conditions of the *Closer Settlement Acts* with regard to payments, residence and improvements to be effected.

The Board may make advances to settlers to enable them to build a dwelling-house or carry out improvements, or the Board may itself execute improvements upon holdings provided that the cost shall not exceed £250 for

any one holding. Sums so advanced or expended are repayable in instalments over a prescribed period not exceeding twenty years. Advances are not restricted to settlers under the *Closer Settlement Acts* but may be made to various classes of settlers under the provisions of the *Land Act* 1901 and the *Murray Settlements Act* 1907.

The following table shows particulars as to the progress of closer settlement for the five years ending June 30, 1914.

TABLE IV. — *Closer Settlement Holdings* 1910 to 1914.

	At June 30th.				
	1910	1911	1912	1913	1914
In occupation:					
Number of holdings	1,880	2,708	3,354	3,906	4,112
Area . . . . . acres	235,938	312,794	407,206	438,321	449,791
Resident population	6,360	10,000	13,400	16,000	16,800
Area unallotted . . . . . acres	9,302	54,214	71,367	64,550	60,028

The holdings shown above on June 30, 1914, were distributed thus: *Farm allotments* 2,579, *workmen's homes allotments* 998, *agricultural labourers' allotments* 535: *Total* 4,112. There is wide variation in the prices at which land has been acquired, which range from £3 per acre to as high as £100 per acre, the latter quite exceptional price having been paid for an area of 233 acres for workmen's homes allotments.

§ 5. STATISTICS OF ALIENATION AND OCCUPATION OF CROWN LANDS.

Up to the end of 1912 about three-eighths of the total area of Victoria had been alienated absolutely and one-eighth was in process of alienation. The following table shows the progress of alienation and occupation for the five years 1908 to 1912 inclusive.

TABLE V. — *Alienation and Occupation of Crown Lands*, 1908 to 1912.

Particulars	Area in Acres				
	1908	1909	1910	1911	1912
1. *Alienated*	23,074,634	23,107,613	23,568,070	23,727,962	23.856,389
2. *In Process of Alienation:*					
Exclusive of Mallee, etc. . . .	1,941,474	2,017,219	*2,079,977	1,953,268	1,932,189
Mallee Lands	2,728,595	3,077,067	3,493,952	4,076,792	4,838,883
Under Closer Settlement Acts.	174,812	190,784	221,565	303,024	397,402
Village Settlements	45,140	42,645	39,278	31,911	30,057
Total . . .	4,890,021	5,327,715	5,834,772	6,364,995	7,198,531
3. *Leases and Licenses Held:*					
Under Lands Department . .	15,955,346	16,384,395	15,433,875	14,719,149	14,443,191
4. *Unoccupied Crown Lands* . .	12,325,759	11,426,037	11,409,043	11,433,654	10,747,649

Total area of State — 56,245,760 acres.

* Including 187,778 acres which, having reverted to the Crown in March, 1911, are now included in Mallee Lands.

The *Village Settlements* shown in the table are certain lands allotted to settlers establishing themselves in groups as village communities. They were first provided for in the *Settlement on Lands Act* 1893 but are now governed by certain provisions of the *Land Act* 1901.

Up to the end of 1912 the total amount realised by the sale of Crown lands was £ 32,983,741 or about £ 1. 1*s*. 7*d*. per acre. A large proportion of the Crown land returned as unoccupied consists of State forests and timber reserves now administered under the *Forests Act* 1907. Another considerable part consists of roads (or of land reserved for the construction of roads) and water reserves, *i.e.*, certain areas permanently reserved in order to provide or protect water supplies. But there remains (as we have already mentioned) a vast area of land, for the most part pastoral, still unoccupied and open to settlement.

UNITED STATES.

THE SETTLEMENT OF PUBLIC LANDS IN THE UNITED STATES.

By Prof. BENJAMIN H. HIBBARD, *University of Wisconsin.*

INTRODUCTION.

Probably no other country in the world has ever had the privilege and the responsibilities of disposing of so great an amount of land available for settlement as has the United States. In Europe and Asia settlement preceded the development of great nations; in Africa and South America great nations have undertaken to manage the settlement of the land, but they have found great numbers of primitive people already in possession, people who were not warlike enough to appear as good objects for slaughter, who could not be driven to other parts of the continents, and who must therefore be dealt with as occupants, even though incumbrances, of the land. In the United States of 1783, and to a greater extent twenty years later, there was what seemed like an inexhaustible supply of fertile land occupied by such a sparse and hostile population that military measures seemed at once necessary and adequate for bringing it into the market free from all claims. Of course the Government in treaties with the Indians agreed to make payments for the land taken, but for the most part the sums paid were inconsiderable. The Indians, while they had developed a very interesting agriculture, were dependent upon it for but a very small part of their living. Hence, it seemed to the white men that the Indians were not using the land sufficiently to justify possession.

Altogether, within the United States proper, there are 2,312,000 square miles of territory which belonged to the Government. True this was not, and probably never will be, anywhere nearly all fit for agricultural use, yet of this vast domain 50 per cent. or more is already in use. Contained within the public domain was, for example, the entire Mississippi Valley, one of the greatest agricultural areas of the world.

The newly formed government was desperately short of money. It had no system of taxation, and the requisitions laid on the states were yielding meagre returns. The suggestion that the public land be made a main

source of revenue was a natural one. Jefferson wrote in 1787 "I am very much pleased that our western lands well so successfully. I turn to this precious resource as that which will, in every event, liberate us from our domestic debt, and perhaps, too, from our foreign one." Possibly it might be shown that the receipts from the sales of public land wiped out the debt of 1787, but it is unmistakably true that as a revenue producer the public domain has been a failure and a disappointment. The problem in the early years was to set a price which would at once bring to the Government an important revenue and still leave a margin of profit to the buyer, even to the buyer who was clearly a speculator. The first plan was to sell in large amounts. A few very large tracts were granted in one way and another to private individuals and companies, but the first real policy was to sell one tier of townships in township lots entirely, and the alternate tiers in section lots, *i. e.* 640 acres. The minimum price was set at $ 1.00 per acre. This plan was embodied in the Land Ordinance of 1785. The sales were disappointing. In 1796 an act was passed which continued the main features of the act of 1785 but reduced the maximum amount of land offered for sale at one time to quarter townships, the minimum to be offered remaining at 640 acres. The minimum price was raised to $ 2.00 per acre. The method of sale was by public auction in the hope that the actual price would greatly exceed the minimum. On all purchases one-half was to be paid within 30 days, and a credit for one year at 6 per cent. interest allowed on the other half. As under the previous act few sales were made, hardly over 50,000 acres in four years.

§ 1. Credit sales and speculation.

From the standpoint of the settler the credit allowed in the act of 1796 was no credit at all, though it might be of advantage to the speculator. The settler who had not the money to pay for land at the time of purchase would surely not have it after one year in the wilderness. Hence the frontiersman began a clamour for longer time in which to make the payment. Furthermore, the actual settler objected strongly to the requirement that he buy not less than 640 acres. This was clearly more than he needed, and many times as much as he could subdue and utilize. The purpose of the Government in selling in such large tracts was in the first place to save the expense of the survey, and in the second place to avoir the "retail business" as it was termed. By 1800 the demand for land to suit the needs of the farmers, and a credit system suited to his ability, was sufficient to cause Congress to act. A little less than four million acres were sold prior to 1800, but much of this was included in a few very large tracts.

The main provisions of the act of 1800 were the reduction of the size of the tract offered making it possible for the settler to buy a half section, 320 acres, directly from the Government, and the extension of credit whereby four years were allowed before the final payment was demanded. The price

was not changed, but a discount of 8 per cent. was allowed for cash payment, thus land bid off at $2.00 would cost $1.84 if paid for at once. Under the credit system from 1800 to 1820 the Government sold over 17,000,000 acres of land, equivalent to a tract about the size of the state of Maine.

The sales on credit were far from satisfactory to either Government or settler. They were unsatisfactory to the Government, not so much because they were slower than had been anticipated, as on account of the failure of the purchasers to meet the deferred payments promptly. Almost immediately after payments became due petitions asking for relief began to pour into Congress. And the pleas were irresistible. The Government had sold wild land to settlers who had gone upon it with the full expectation of paying for it. The payments were apparently not very heavy, but the settler's income was nevertheless inadequate for meeting it. Almost without exception he had less money during the first few years after moving into the new country than he had when he came. Money was scarce ; the land was not easily made to produce; and produce was not by any means always salable. Thus Congress was all but compelled to grant the relief. Thirteen times between 1806 and 1820 acts were passed granting extensions of time on payments.

One very serious trouble with the land selling system was the amount of land which each settler was obliged to take in order to get any. He was compelled to become a speculator. It was the opinion of many congressmen that the purchaser of 320 acres would at once sell half or three-quarters of the amount to others. But this was not so easy. To begin with the original buyer probably paid $2.00 an acre. He might not care for the entire amount of the half section but in case he should offer to sell to someone else a part of it he would very naturally want either a rise in price, or he would want to keep for himself the more desirable part of the land. The prospective buyer would not be willing to pay more for the land than the price at which the Government would sell him another parcel, neither would he be willing to take the poorer land, so as a rule each bought more than he wanted and so reduced very much the chances of subsequent sales. All were over supplied.

By the time a couple of million acres had been sold the minimum size of tract offered was reduced to 160 acres. But even so the settler still had twice as much as he could use, and evidently more than twice as much as he could pay for.

There can be no doubt that land was early the subject of speculation. Washington in 1784 made a journey to the West. It is well known that he was a great speculator in western land himself, yet he recognized the evil of the practice. He wrote: "Such is the rage for speculating in and forestalling of lands on the northwest of the Ohio that scarce a valuable spot, within a tolerable distance of it is left without a claimant. Men in these times talk with as much facility of fifty, an hundred, and even five hundred thousand acres, as a gentleman would formerly do of one thousand." It was Washington's opinion that the Government should sell the land at a price high enough to make it unattractive to speculators. This idea was later brought

forward by a great many different men. In fact it persisted until the time of the Homestead Act, 1862. This view has also been prominent in the discussions of the land problems of New Zealand.

It must be remembered that there were during the first half of the nineteenth century fewer opportunities by far for speculation than there have since been. Western land appealed powerfully to the imaginations of men. Speculation was practised mainly by two classes of purchasers. Most prominently by those who as non-residents invested their money in such tract as they could buy hoping that settlement would overtake them, or flow around them, and that they would by that means be able to gain an unearned increment on the investment. The other class of speculators were the settlers themselves. It would be impossible to measure this kind of speculation in any quantitative way. The great mass of the settlers hoped for a rise in the value of the land they bought and, normally, it was the thing to expect. Where the purchases corresponded in size to the amount of land needed for farms, speculation was at least subordinate to the desire for land for productive purposes. This might also be true where the minimum offering was too large to permit the most economical use of the land. In any event the settlers either voluntarily or otherwise bought much more land than they could use and struggled desperately to hold it with the hope that a rise in price would reward them for the effort.

However, the speculation by settlers whether on eighty or three hundred and twenty acres was of small consequence. In fact so long as the owners lived on the land and gave themselves to the upbuilding of the country they may very well have earned a large part of the so-called unearned increment in the value of their land. It was the investor who preceded the settler, took advantage of the liberal offers of the Government, and held the settler up for an advance in price without having contributed anything to the development, in short, it was the speculator who was that and nothing else, who thwarted the designs of the Government and put a heavy burden upon the community.

There were three great periods of speculation between 1800 and 1860. The first was immediately following the War of 1812, caused largely by a very foolish bargain between the United States treasury and the western banks. The treasury wanted to circulate its notes and agreed with the bank that it would receive bank notes in payment for land if the banks would in turn receive and re-issue treasury notes instead of sending them in for redemption. The bank notes were cheap and easily obtainable. As a result a great deal of land was bought with paper money of doubtful value and the treasury was soon obliged to refuse to accept them in payment for the land. This left the purchasers in a bad predicament since theyhad paid but one-fourth down and were expecting to get hold of more similar money for subsequent payments.

Complaints from western settlers and western congressmen soon began to come in. "A petition presented to Congress from Ohio prayed that additional regulations may be adopted in relation to the sale of public lands, in order to prevent speculations, and to protect the rights of poor

men." (1) An Ohio editor speaks of "those mushroom speculators who have infested this western country by buying at a credit, and holding land to the prejudice of the community." (2) Another Ohio paper bears similar testimony. "This mode, now proposed, would not only put at rest, forever, those vexatious appeals to Congress for relief, but would nearly annihilate those speculative and high prices which have been hidden to the great injury of the community, but in reality never intended to be paid. Should a bill [providing for cash sales]... be carried through Congress, it would be a means of benefitting the states of Ohio, Indiana, and Illinois particularly, as large entries have been made, not for settlement, but for resale." (3)

Mr. Sloan, a representative from Ohio, in an extended speech in the House said: "Your best land is generally purchased by speculators who have money, not with a view of cultivating it themselves, but to keep it until the settlement of the country enhances its value, and then to sell it to some person at an advanced price. Companies are formed in various parts of the Union who send their agents to the Western Country, who enter whole townships merely with a view to speculation. (4)

The testimoney from Kentucky was similar, with the additional charge that the hard times of 1819 were attributed in large measure to speculation in land. (5)

In the Southwest speculation had gone wild in the earliest years of land sales by the Federal Government. Hence it was no new thing. When revived in the years following the War of 1812, the Yazoo affair was perhaps the most notorious of all get-rich-quick undertakings in connection with the public domain. Briefly stated the Yazoo episode consisted of sales by the state of Georgia for a few cents per acre of some thirty-five million acres of land claimed by her in the Mississippi and Alabama country. This took place between 1789 and 1795. On acquiring the land from Georgia the United States became responsible for making good certain claims of these purchases, and paid, eventually, over six million dollars in satisfaction of them. (6)

Speculation in the Southwest was at times accompanied by fraud. For example a company of about forty men in Alabama in 1819 agreed among themselves not to bid above the minimum price for a certain township of land. "They got the land at two dollars and immediately offered it at auction and realized nineteen dollars per acre for it,... not a bad day's work." (7) A similar combination of speculators some fifteen years later is described by an aggrieved party. (8)

(1) *Annals of Congress*, 11 Congress, 2001.

(2) *Ohio Monitor*, May 11, 1820.

(3) *Western Spy and Literary Caded*, (Cincinnati), Sept. 7, 1820.

(4) *Annals of Congress*, 16 Cong., 1 sess., 1895.

(5) *Kentucky Reporter* quoted in *Niles Register*, XVII, 10.

(6) HASKINS, *American History Ass'n Report*, 1890, p. 83; DONALDSON, 83-85; *St. Papers Pub. Lands*, I; MC MASTER, Vol. III; HILDRETH, Vols IV, V and VI.

(7) *Alabama Courier* quoted in *Ohio Monitor*, May 20, 1819.

(8) *Niles Register*, 46, 326.

A little earlier in the year 1819, in a carefully prepared Report to the House, the committee on Public Land speaks emphatically on the subject of speculation: "Experience," says the committee, "has exploded the opinion that injurious speculators might be discouraged and monopolies prevented by simply fixing a high price on the sale of lands;... the industrious class with small capital have been prevented from becoming purchasers with a view to settlement and cultivation. (1)

The only remedy suggested was the sale of land in smaller tracts thereby permitting the man with a hundred dollars to buy directly from the Government.

The next great period of speculation was that just preceding the panic of 1837. The sales of land during 1835 and 1836 were in large measure to men who bought in order to sell again at an advanced price. This fact is so patent as to need little or no proof. There is no evidence to suggest even that additions to the farming area of the West kept pace with the land sales; no such amount of land could have been assimilated in so short a time. Conditions were, however, ripe for speculation. The Erie Canal, steamboat navigation, highways, and above all the railroads, led or gave promise of leading from the cities of the East with their markets to the plains of the West with their fertility. Thousands of men, with little or much money, had a vision of settlement, wheat, prosperity and profits. There was an undue amount of zeal in attempts to help the vision to come true. The condition of the currency was such as to facilitate greatly the speculation. "As the market value of land frequently rose to much above the Government selling-price there was an eager contest on the part of those who could borrow money, to buy for speedy sale at an advanced price or hold the land for a future profit. Borrowers found ready accomodation at local banks, and with the loans thus secured made their purchasers from the land receiver; the purchase-money in many instances was thereupon redeposited by the Government in the bank whence it came, where it once more served as a loan to another or even to the same land speculator. These local banks and the Government surplus thus became involved in a common network of credits; banks were established to meet this temporary demand, so that the lender leaned upon the borrower." (2)

The West was fully aware of the nature of the sales. An Iowa paper describes the condition of a new state:

"The rage for speculation in wild lands, though natural enough in the present state of things, and, indeed, unavoidable to some extent, is, notwithstanding, a great impediment to the pursuit of agriculture. Men come to this country to make money by speculating, not by steadily pursuing a course of tilling the fertile soil, of which they become the temporrary proprietors, and which soon passes into the hands of others, who are

(1) *American State Papers, Public Lands*, III, 366. In 1812 the same committee with Mr. Morrow of Ohio Chairman as in 1819 were positive that speculators could do no harm with land at two dollars. *Public Lands*, II, 730.

(2) DEWEY: *Financial History of the United States*, p. 225.

equally disposed to sell out at an advance. Hence the low state of the agricultural art everywhere to be seen in this state ; and until all the public land is sold, we despair of seeing even a beginning to a regular system of cultivation.

"There is another view to be taken of this subject. The present mode of speculations is a species of gambling, leading men to rely upon uncertain events for the completion of their grasping and eager wishes for wealth. It puts a stop to the pursuit of every object worth the attainment of good and virtuous citizens. It operates as an essential check to efforts to arrive at moral and intellectual excellence. It impedes the progress of science and literature, and of every species of moral culture. It leaves the mind a barren waste, unprepared for the reception either of moral or religious impressions. It is the moral upas, which taints, with the poison of its influence, every aspiration of the mind after purity of thought and integrity of conduct. Happy is the man who escapes unscathed the enticing vortex." (1)

A Boston paper complained that money was going over the mountains as fast as railroads and steamboats could carry it, and yet nothing was heard of increased agriculture. "The land is not transferred to those who cultivate, but to those who speculate." (2) A southern paper gives a description of the speculator and his operations. Probably the chances of success were somewhat lessened by the events of the year 1837, but in the main it unquestionably describes one type of speculator with fidelity. Unlike most of the accounts of speculation much credit is here given the speculator for his work as a prospector. This he undoubtedly deserves. Whether his services were, or were not, worth what they cost depended on the information and integrity of the man. Again the value of these services could easily be over-estimated from the fact that the first venturer very often sold to a second man of the same class except that the latter often had not been on the frontier. Hence the services of the prospector were likely to lose greatly in the process of percolating through several strata of owners before reaching the farmer. The account reads :

"The western country is full of men, wandering from place to place, for the purpose of inspecting public lands, and entering them, when found sufficiently fertile and well situated to be tempting to real settlers. The land speculator goes forth with a guide and a pack horse ; and for weeks perambulates the uninhabited forests—he pitches his tent every evening, under the branches of some wide-spreading tree— builds his fire, and prepares the frugal meal which has been afforded him by his unerring rifle. When he has selected more tracts of virgin soil, shaded with oaks, interspersed with natural prairies and watered by some deep broad stream, he returns to the land office, and pours forth his *all* into the coffers of government. From being a pionner of the wilderness, he is soon changed into a broadcloth gentlemen... He puts on his *long tailed blue*, sallies forth to the villages,

(1) *Dubuque Visitor*, Nov. 9, 1836.
(2) *Boston Courier*, Aug. 13, 1836.

country towns and cities. He talks loudly of the unexampled prosperity of the western country; of inexhaustible resources, and finally points out a particular section of the country, which, he says, is selling fast, and is superior to anything *he* knows of. He meets the tide of emigration and endeavors to direct it toward this spot of his predilection. If he succeeds, he realizes in a short time, a ten-fold profit; and begins again, with enlarged capital. Hardly ever does it happen that he fails; he may have to wait more or less long; but the spreading sea of emigration finally covers the district in which he made his location — his lands being choice tracts command a preference, and are bought at ten or twenty dollars an acre, when government lands alongside are rejected at ten bits.

"A great many fine things may be said against this species of trade. It cuts off, and forestalls the real *bona fide* settler... Prevent this trade and we are satisfied; but, since it is permitted and encouraged we cannot blame those who turn it to profit. In fact it is doubtful whether our western wilds would be colonized half so fast, without these speculators. They stimulate and keep up the spirit of emigration and enterprise... they seek out and find favorable places for making settlements which otherwise would remain undiscovered... they encourage the European emigrant to the cultivation of the soil, and guide him to a fertile and well situated spot. Without the land speculator many would remain vagabonds in our cities, who are drawn off to the country, and at last become rich and respectable planters." (1)

One of the worst effects of speculation was that it held land out of the market for at least a time and so compelled settlement to pass around or across it. Such would in the natural course of events take place, and testimoney that it did take place is abundant. (2) Agriculture was necessarily in a backward condition under these circumstances. "The rage for speculation in wild lands is a great impediment to agriculture. Men come to this country to make money by speculating, not by pursuing a course of tilling the soil, of which they become the temporary proprietors, and which soon passes into the hands of others who are disposed to sell out at an advance. Hence, the lost state of the agricultural art everywhere to be seen in this state (Michigan) and until all the public lands are sold we despair of seeing even a beginning to a regular system of cultivation." (3)

It was an open secret that many members of Congress were deeply involved in land speculation. For example Daniel Webster bought several sections of land in Wisconsin and other tracts in Illinois. He is said to have invested $60,000 in lots in Rock Island, Illinois (4). This was a perfectly open and honorable transaction so far as is known. However, the

(1) *Wisconsin Democrat*, Dec. 22, 1836.

(2) *Belmont* (Wis.) *Gazette*, Nov. 2, 1836; *Dubuque Visitor*, Sept 7, 1836; *Miner's Express* (Iowa), Jan 16, 1850.

(3) *Dubuque Visitor*, Nov. 9, 1836.

(4) *Iowa News*, July 15, 1837.

relation of Congress as a body to the banks, with their paper money and the use of the same in land speculation was in question. On June 20th, 1836, the House appointed a committee to inquire into the matter. In due time the committee reported tentatively asking that its membership be enlarged and that the inquiry proceed. The House refused to accede and the committee was discharged. (1)

The specie circular of 1836 and the panic of 1837 brought a sudden end to the work of speculators so far as purchases from the Government were concerned. The land previously bought could not be resold advantageously and much of it which had been bought with borrowed money proved bad property to the buyer. In a desperate effort to hold such land exorbitant rates of interest were paid (2). Much land was sold for taxes; much was traded off and gotten rid of in any very possible way. Some years ago the writer made an attempt to trace the transfers of some of the great tracts of land held by speculators in Wisconsin, but with indifferent success. A brief account was, however, ventured: "Greedy as were the statesmen and other wealthy men who invested their money in western land during the palmy days of 1836, the very fact that they were unable to form anything approaching a monopoly in land rendered them almost as helpless as their unfortunate friends whose capital went down in mercantile disasters of the older states. It is impossible to tell from ther records much about the sums realized by these large holders when they finally parted with their land. The greater share of it was held by firms of several members and the number of quit-claim deeds with consideration one dollar fill many pages of the register's book. Nor is this all the difficulty; the most of these firms owned land in different counties and even different states, and very frequently transfers were made of one-fourth, or one-tenth, or even one-nineteenth of these widely scattered acres, and the exchanges of various kinds of property for land again complicate matters hopelessly. Occasionally where the sale was made directly to a *bona fide* purchaser previously to about 1850, the price was a little more than the original figure — one and a quarter dollars. (3) Contemporary testimony confirms the conclusion. (4)

(1) *Niles Register*, 50, 434.

(2) *Lee Co.* (Ia.) *Democrat*, Dec. 9, 1843; *Miner's Express* (Ia.), Jan. 16, 1850.

(3) HIBBARD: *History of Dane County* (Wis.), p. 100.

(4) Lands have been entered in this county at one dollar and twenty-five cents per acre, and after paying taxes on them for years their owners have sold them for one dollar per acre to avoid further taxation. Show us a non-resident who has made much money speculating in western land, and we will show you a rare bird, more rare by far than a successful gold hunter... Large investments in land always defeat their own object... We need no national reform to punish speculators... The only way in which anything can be made by buying western lands is to locate in small tracts remote from each other so as not to interfere in the general settlement, and even then the settlers skin the speculator out of his profits by taxation." *Madison Argus*, October 22, 1850.

Testimony is abundant to the effect that speculation ran ahead of settlers and bought up a large portion of the public domain throughout the Mississippi Valley. Except in the panic periods they made money. The normal trend of events is thus described: "What is Western land speculation in reality? It is simply this: One man buys land at $1.25, sells it at $2.50 or $3.00, and invests again, further west! The second purchaser makes some improvements upon the lands, and sells for $5.00 per acre. In the meantime some other, speculator, has built a mill near by and lays out a village, and the third purchaser sells the tract of land of which we have been speaking at $15 or $20 per acre. In a year or two, a railroad comes along; which is built by some other, speculator, because it will pay, and the fourth buyer sells for $25 per acre, to a purchaser who wishes to put on improvements and occupy it himself, to whom the same property will be worth $50 per acre in a few years.

Here are four men who have doubled and trebled their money within a year or two, from the day of investment, and this is the simple history of land speculation in the fertile West." (1)

The professional speculators who "produce more poverty than potatoes, and consume more mid-night oil in playing poker than of God's sunshine in the game of raising wheat and corn" did their share of buying and holding for a higher price. At the same time the farmer himself became a speculator to the extent of his means. (2) It would be impossible to trace speculation of this kind, if for no other reason, because it can not be identified in the records, and because no one knows whether the first, third, or fifth eighty acres owned by a farmer, was held for speculation or for farming purposes. However, when the acreage runs into the thousands there is no room for controversy. A study of the books at the Iowa land office shows that the greatest purchaser of land in that state direct from the Government, bought 345,000 acres, or what would amount to about a county 24 miles square. The next largest purchaser secured 273,000 acres, or over three-fourths as much, while the purchaser of the three greatest speculators amounted to almost three-quarters of a million acres, or about two counties of regular size, with two townships over, while the ten largest purchasers secured an amount equal to a little more than three counties or one thirty-third part of the state. Of purchasers who secured over ten thousand acres each there were between twenty ad thirty, while of those securing a few thousand each there were legion.

§ 2. Cash sales.

The change from the credit to the cash system of selling land was hastened by the financial troubles of 1819. The acreage sold fell off greatly with the advent of the new plan, but it was undoubtedly due to the collapse of

(1) *Charles City* (Ia.) *Intelligencer*, Aug. 20, 1857.
(2) *Dubuque Daily Republican*, Aug. 14, 1857.

the boom period rather than the change from credit to cash payment. Cash sales amounted to but a million acres a year, or even less, for about a decade. Then came the craze for speculation in the years preceding the crisis of 1837. During these years the sales of public land passed all bounds known either before or since. In the years of 1835 and 1836 the Government sold land greater in extent than the entire state of Illinois. These sales for the years just mentioned were made for the most part to speculators in the East. Members of Congress were among the most enthusiastic bidders. Companies were organized for handling big deals. These transactions brought out a proposal in Congress to limit sales to actual settlers, but nothing so radical was done. The whole episode of land speculation during the period from 1830 to 1837 did, however, have a salutary effect on Congress and contributed much weight in the arguments for a general pre-emption law. In other words it resulted in an added protest from the actual settler against the sale at auction of land which he had already settled upon and improved.

Moreover, the cash result of these sales was a distinct disappointment to the men who still hoped to make the public domain an important source of federal revenue. The minimum price had been fixed at $ 1.25, but this was done in the expectation that much of the better land would sell for prices quite beyond the minimum. As a matter of fact the sales for the twenty years, 1820 to 1840, were 73,620,000 acres, an area greater than the state of Missouri. Although a few tracts sold for twenty or thirty dollars an acre the average price received was less than three cents per acre over the minimum. It was the purpose of the auction system of sales practised throughout this period, as well as during the time preceding to get from each bidder the highest figure which competition would make him pay. But in reality competition was not an active force in these transactions. In some cases the land was no abundant and even so uniform in character as to lead buyers to prefer the larger amounts which a given sum of money would buy at a dollar and a quarter, than the smaller amounts at a higher price even though the former conditions means land located somewhat unfavorably. Again the normal action of competition was precluded by a combination among the speculators who were doing the bidding.

Cash sales continued after 1840, in fact have continued to the present time, but modifying laws have been enacted such as to change the significance of the plan very essentially. The modifications were primarily in the direction of free land for the settler, and secondarily in favor of state control over and participation in the sale of public land.

§ 3. Pre-emption of land and the formation of settlers' associations.

The settlers were by no means passive on all occasions. In fact they payed a major role in the struggle against speculators, or land monopolists as they were often called. One of the leading incidents in connection with the settlement of the public domain was the persistent occupation of much

land ahead of the survey or sale. For some years Congress took a determined stand against this, even going so far as to send soldiers to drive the settlers off. This was not a hard matter to do, but to keep them off was quite another thing. The soldiers often formally evicted the settler, gave him orders not to return, and even tore down his cabin in order to prevent the return. However, the soldiers themselves were more likely than not to sympathize with the pioneer and in any case the dispossessed settlers got together as soon as possible after the departure of the enemy and rebuilt the cabins and continued to hold possession.

It was not the soldier who threatened in any serious way the possession of the land by the squatter. It was the speculator. Nothing was quite so attractive to the unscrupulous speculator as the opportunity to buy a tract of land already partly cleared and located near roads and other appurtenances of civilization. Two methods of defence were undertaken. The first was an appeal to the Government for a right, as it was termed, to the first opportunity to buy the land on which they were settled. This meant the privilege of buying at the minimum price, since any other concession was likely to prove worthless. The land was offered at auction and the outsider could therefore, if not restrained from doing so, bid for the settler's improvements. Thus if the settler were to be accord any rights as a squatter he must, in all reason, be given the privilege of retaining his improvements, or at any rate their value. The demand made by the settler was for what came so be called the right of pre-emption, a right of purchase directly from the Government in accordance with an agreement made. A great number of pre-emption laws were passed by Congress, differing in import but in the main becoming more and more liberal toward the settler until in 1841 a law was passed which applied to all Government land not otherwise provided for. This law gave the settler the right to settle upon land before it was offered for sale by the Government, and to have the exclusive right to purchase a hundred and sixty acres at $ 1.25 per acre at the time the land should come into the market. This meant that no one else should have the privilege of making the settler pay a higher price for land cleared and improved by his own labor by over-bidding him, or beating him out of his home by getting ahead merely in the matter of time in making the $ 1.25 bid at the auction or land office.

Closely connected with the question of pre-emption rights were the organizations of settlers for the purpose of protecting themselves against the land sharks as they called the men who tried to take advantage of the settlers in bidding for land already occupied by the latter. These associations often antedated the enactment of a pre-emption law; at other times they aided in its enforcement. In all cases the associations represented local, voluntary authority, being akin to "regulators" or "vigilance commitees." "Public opinion is stronger than law" was the sentiment of these people, yet it was far from their purpose to violate law. It was, however, their purpose to supplement it. Many of these associations were conducted with remarkable formality. Officers were elected, books were kept, and the names of members recorded in connection with which all the facts were entered. These

associations interpreted the law with respect to improvements and residence requirements to be made on the land. On the occasion of a land sale a "bidder" was appointed whose duty it was to bid off for each claimant the land to which he was entitled. These bids were all at the minimum price, hence the so-called auction was a mere formality. Should any outsider dare to raise the bid even by the smallest amount he was taken care of in true western style and dealt with according to the resistance he offered and the anger which he had aroused. As a rule all that was required of him was that he withdraw.

§ 4. Distribution among the states of the money from public land sales.

Early in the nineteenth century the proposal was made to distribute to the states the money received from public lands. By about 1830 the question had assumed important proportions and at the same time had conformed to party lines. The Whigs wanted to sell the land and distribute the money among the states. The Democrats wanted to cede the land itself to the states in which it lay. These views were favored by the fact that the public debt was greatly reduced and the Government, therefore, no longer so much in need of revenue from public land. The question of state rights was involved in the discussion. Many of the states believed themselves entitled to a direct share in any revenues wich the general Government collected but did not immediately need. Another, and rather more reasonable view, was that the states within which public land lay were entitled to it and whatever income it should bring.

An act providing for the distribution of the funds derived from public land sales was passed in connection with the pre-emption act in 1841. The Whigs were in power and enactments were clearly of their making. The most violent opposition to the principle of distribution of the funds came from the Democratic leaders on the strength of its effect on the tariff. It was believed by the Democrats that in turning a considerable sum of money from the federal treasury into state treasuries that it would soon result in a shortage of federal funds, a condition which in turn would become the excuse for the re-enactement of a protective tariff. To obviate such an outcome the Democrats managed to carry an amendment providing that whenever the tariff duties exceeded twenty per cent. *ad valorem* that the distribution of land money to the states should cease, but a year later the amendment was repealed. Another and more important concession to the Democratic views on the disposition of land was made in connection with this act whereby a half million acres were granted to each of the public land states, that is to say to the western states within which the public land was located. The precaution was hardly necessary for, unfortunately for the Whigs, the land sales were slow, the amount of money in the federal treasury was small and the president, who had so warmly championed the bill in 1841,

recommended its repeal in 1842. A few years earlier Henry Clay had estimated the probable amount to be distributed among the states at $20,000,000 per year. In reality, three quarterly instalments were paid and the amount so disbursed fell well short of three-quarters of a single million dollars. The remedy was the inevitable repeal or suspension of the act, and the former alternative was resorted do before the date for the fourth quarterly instalment. This action was taken as one point in the Tariff Act of 1842.

§ 5. Graduating the price of public land.

Almost from the beginning of the public land controversy there had been a strong sentiment in favor of a price graded to fit the varying qualities of land. Time and again the subject was up for debate in Congress from 1790 till 1854, but until the latter year it was uniformly decided in favor of a single minimum price for all land irrespective of its quality. The argument in favor of a graduated price was that the uniform price for all land prevented the settler from buying inferior land without paying more than it was worth ; compelled the settlement to take place in an irregular manner, leaving much unoccupied territory in what would otherwise be a solid settlement; deprived for long periods of years the local governments of the power to tax a great deal of land; compelled a greater outlay for roads and travel ; and, finally, deprived the Government of much income, or at least delayed the income indefinitely.

In favor of the fixed minimum was the argument that after the choicest lands had been sold the inferior lands also would soon bring the same price. The two lines of argument split on sectional, not party, lines. The West wanted the graduated price; the East insisted on the single price. The Public Land Office, the congressional committees on public lands, the legislatures of the states in which the land was located all demanded that the price be graduated to fit the quality, but it was of no avail until, in 1854, after two-thirds of a century of argument the provision was enacted into law. This piece of legislation was, in an unusual degree, due to the efforts of one man, Thomas Hart Benton of Missouri. Mr. Benton was easily one of the ablest men of his time to appear in Congress and for about thirty years he kept the question of the "sale of refuse lands," as he termed it, before Congress and the people. Benton argued that the contemplated reduction in price would bring in more money, reduce the debt, and obviate the necessity of so high a tariff on imports. Also that the reduction would facilitate settlement of unoccupied territory. It was argued by various friends of the measure that it would not reduce the value of land held by settlers, since to them land had a "use value;" it might possibly reduce the value of land held by speculators.

Some effort was made to prevent speculation in the land offered at the reduced prices. It was provided in the law that land should be sold to those owning adjoining land or the those who should settle on it, the idea

being that land sold to men already possessing a tract or about to settle on a tract would in most instances result in enlarging farms but not in widespread purchase for the sake of speculation.

There was an amount of land about equal to the area of Nebraska made available at price ranging from $1 down to 12 ½ cents an acre. Almost at once there was a pronounced increase in the sales, 15,700,000 acres going into private hands within a year, at an average price of 73 cents per acre. In Illinois and Alabama especially, there was much land which had long been in the market and much was now sold at less than 50 cents an acre. The act was continued in effect until 1862 by which time over 25,000,000 acres had been sold at reduced prices.

§ 6. The homestead.

Throughout all the legislation from 1760 to 1862 there ran the question as to the principle of free land to the settler set over against that of revenue to the Government. The reductions of prices, the pre-emption provisions, the cash sales, all were made in whole or in part with a view to making it easier for the man actually living on the land to purchase and pay for the amount needed for a farm.

Many governments had followed the plan of granting land free of charge to settlers. For instance France and Spain had done so in America. It had been done over and over again in the colonies which became our eastern states. However, the idea that public land could become a source of federal revenue was almost inevitable in view of he desperate straits in which the newly formed government found itself following the Revolutionary War. To men in the eastern states who heard of rapid advances in values of western land it seemed that there must be an initial value in unoccupied land. Moreover, this value belonged to the Government. Had not the Government gained possession of the land through the expense and sacrifices of conquest? It looked like good logic on the face of it to conclude that since the Government had bought these lands and paid for them out of common funds and sacrifices a sale was more reasonable than a gift by the Government to an individual in which case the individual would be getting a donation from socially created values. The arguments in favor of selling prevailed although the settlers always insisted that land was well earned by the time it was improved. As early as 1797 petitions were sent to Congress asking that donations be granded to families which should live for three years on the land. From that time to the final passage of the Homestead Act in 1862 the pioneers favored free land.

The Homestead bill ran a tortuous course. For years it was before Congress in one form or another, but with little or no encouragement. At times there was an effort made to grant to the statees the land which had been on the market for years without selling in order that the state might grant such land to settlers. The plea was put forward that such grants

would prevent the growth of a landlord-tenant system of farming. In general the western states asked that land be granted free to settlers who should live upon it and improve it. Sometimes special provisions were suggested such as grants to those living on the border of the wilderness, or the desirability of making free grants contribute to the formation of more compact settlement. There was a deep conviction that the sale of wild land meant virtually a payment of tribute by the new states to the old. The tariff figured as a factor in that the receipts from land made customs collections less necessary. Hence, those who were desirous of a high tariff were easily converted to the free land programme since that would mean a probable reduction in federal income and leave the revenue argument open in connection with the tariff. For example, with the advent of the Free Soil (1) party came a wider spread demand that a portion of the soil be granted free to every applicant, or to every landless applicant. The Free Soil Democrats in 1852 declared in their platform that all men have a natural right to the soil. With the realignments that came at the time of the Civil War the possibility of passing a Homestead Act soon became apparent, and the law was passed in 1862.

The *Homestead Act* provided that a settler might receive a quarter section (160 acres) or, within so many miles of a railroad, 80 acres of land free of cost. He was to live on and improve this land for a period of five years, at the end of which time the deed would be issued.

Under the *Homestead Act,* over 150,000,000 acres of land have passed into private hands. This is an amount equal in area to Texas and California combined.

It was a clear case that Congress was to be disappointed in the application of the Homestead laws to the arid and forest lands. On the great plains where the rainfall is but ten to twenty inches the grazing business developed during the early years of operation of the *Homestead Act.* The spirit of the Act was often violated by men interested in stock raising. They "homesteaded" the strategic tracts, such as those with water on them, and in that way kept settlers off. However, the prospects of the settler who depended on growing grain in the manner followed in the Mississippi Valley were dreary enough. As it became manifest that the small farmer, occupying, for example, a farm of 160 acres, was in a precarious situation the Government undertook to remedy the matter. It was argued that more land was needed and as a consequence the *Desert Land Act* was passed, giving to persons fulfilling certain requirements in improving and settling, 640 acres. Later this was cut down to 320 acres.

It was clearly evident that the *Desert Land Act* had not solved the riddle so far as the arid and semi-arid land was concerned. The tract so granted was too small for a stock range, usually not valuable as a farm without irrigation, and too large to irrigate. Two important modifications of the Act have been passed. One known as the *Carey Act* provides for

(1) It must be remembered that Free Soil as here used was in contrast to slave soil, and had no significance with respect to the acquisition of land by settlers.

the granting of a million acres, and in some cases two million acres, to the states to be irrigated by private enterprise under state direction, the settler to pay the necessary charge to the development company for water and 50 cents an acre to the state for the land. After the irrigation system is fully equipped and the development company had has its pay for the same, the system is turned over to the settlers to be run by them co-operatively. This has proved a good plan except that mistakes have been made in the estimate of the amount of available water, resulting in disappointment and litigation; and in many instances the estimates of the cost of supplying water have been high and the settlers have had exorbitant prices to pay.

The other modification of the Act is the work of the United States Reclamation Service. Under this plan the Government developes the project and sells the land and the water to the settlers, they to assume the management after the Government has completed the system.

Something over three million acres of land are included in the Reclamation and *Carey Act* projects. The relation of the Government land policy to other irrigation arrangements presents many knotty problems. The rights over water supplies, the responsibility of a company undertaking to sell and water a tract of land, these are questions for which there are but few precedents.

§ 7. Educational grants.

Congress began early to use the public domain for the encouragement of education. The ordinances of 1785 and 1877 provided for the reservation from sale of Section sixteen of every township as school land. This amounted to one thirty-sixth of the total area of land. The plan became general on the admission of states and continued, until in 1850, Section thirty-six was added to the reservation making an eighteenth of the total domain to be used for that purpose. Over 68,000,000 acres have been by this plan set aside for school purposes. In addition to these grants for common schools the Government has granted from two to four townships of land to each new state for universities, and in the *Morrill Act* of 1862, granted land to all states in proportion to their representation in Congress, for the establishment of Agricultural Colleges. This grant amounted to nearly 10,000,000 acres. Thus altogether not far from 80,000,000 acres, or an area equal to Wisconsin and Michigan has been granted to states for educational purposes.

The land granted to the states, a large share of which was for educational purposes, was put on the market and sold for the most pact promptly. The states had no uniformity in the prices asked for land, much of it was sold for 25 or 50 cents an acre, making it for a time hard for the Federal Government to sell its land, the minimum price of which was 1.25. In recent years the states wich land to sell have been holding it at 10.00 per acre.

§ 8. Grants to transportation companies.

Enormous grants of land were made to railway companies. Between the years 1850 and 1883 Congress granted over 100,000,000 acres of land to railroads. This plan was followed in the interest of settlers presumably, the belief being that the greatest need in aid of settling the West was the means of carrying freight from there to the eastern markets. There was a great deal of discussion as to the equity of giving land to railroads. In the case of the roads running to the Pacific coast it was clearly a matter of national policy. The West needed to be bound commercially to the East. Congress granted alternate sections of land through a strip ten miles wide on each side of the Union Pacific and Northern Pacific railways within the states through which they passes and double the amount within territories traversed.

Larger amounts of land were granted to the states, which in turn were to grant them to railways, than were granted by the federal Government directly to such companies. The total amount of land granted to railways was about equal in area to the state of California.

The railway lands were put upon the market and sold at a price not far from $ 10 per acre on an average. Much of the land is worth comparatively little and may not be sold for a long time to come, but it is safe to say that the land was ample in a very great many instances, to pay for the road to which it was granted.

§ 9. Minor acts under which land was granted to settlers.

In 1873 Congress enacted the *Timber Culture* law under which a settler was entitled to a quarter section (160 acres) of land provided he set out and cultivated not less than the 40 acres in timber. Finding this impracticable the area to be planted was reduced to ten acres. The act remained in force until 1891 during which time about 10,000,000 acres were entered by claimants. The amount of land thus alienated from the Government was important. The amount of timber induced to grow upon it was negligible. It was an attempt to dot the prairies with big groves which would act as windbreaks, modify the movements of water from rains and snows, or as some thought, modify the climate.

In 1878 the *Timber and Stone Act* was passed. This was an act under which land valuable for timber or stone but not for agriculture was made salable at $ 2.50 per acre. This has not been looked upon as an important act, yet 13,000,000 acres have been so disposed of.

In 1849 Congress began a series of *Swamp Land Grants* which resulted in giving to the states about 16,000,000 acres of land. Presumably this was land which needed draining, which was a menace to

health and a hindrance to communication. It was the intention of Congress that the land which was really of little value as it then stood on account of its wet nature was to be included in the grant. Later land "subject to overflow" was included. Then came the granting of indemnity lands, that is land in lieu of swamp land already disposed of. The outcome of the whole matter was one involving the most fraud of any in which grants from Federal Government to the states was concerned. Perfectly high, dry land was obtained in any number of instances. Then the states finding themselves in possession of land which had cost them nothing began to offer it at absurdly low price and men near to the officers in charge became the purchasers.

Out of it all substantially no drains or levees were built, and at present out of taxes the work of protection and reclamation is in progress.

§ 10. Private land grants.

Under one pretext or another about 100,000,000 acres of land were given to private claimants. These claimants include the military claims, which in themselves amounted to around 70,000,000 acres. The remaining 30,000,000 acres were given for all manner of objects, such as special services, the cultivation of certain crops, residence on the frontier, and the like. Considering the pressure brought to bear on Congress the wonder is that no more than 30,000,000 acres were so appropriated. The military grants almost of necessity came to an end before the time they might have applied to our Civil War soldiers, since the Homestead law made land free to substantially all.

Conclusion.

In looking back over the history of the United States land policies what judgment is to be passed upon them? As a means of deriving a federal revenue the failure has been complete, since more money has been paid out than has been received in connection with the public domain. The next main plan was to put the land into the hands of those who needed it and who would use it. This idea came to permeate the views of many congressmen a hundred years ago and after some forty years of struggle and debate the principle was put into complete practice so far as the Homestead law was applicable. There were in Congress and in the administrative offices a number of men throughout the long period of debate who wished sincerely to devise means of holding the land out of the clutches of speculators and secure it to settlers. This policy requires clearer vision for its realization than any number of these leaders had. To put land into the hands of settlers was no guarantee that it would stay there. The pre-emption laws

prescribed settlement and improvement only till such time as payment should be made, after which the land could be disposed of at will. The Homestead law was, and is, the outstanding example of land given to settlers in such a manner as to compel its retention for a considerable time by the settler. And this was for but five years. Where the law was rigidly enforced it was difficult for a man to get hold of more than 160 acres of land under the *Homestead Act*, but it was not difficult, by collusion, to hire men to homestead for the owner of a herd of cattle and so keep the strategic points in the hand of a few men. Or it was not even necessary to resort to illegal means. The man interested in holding a big tract of land was in a multitude of instances able to do so by buying out the homesteader who was fortunate enough to get hold of the desirable tracts from the settler's standpoint. This sort of thing did not, and could not, take place where most of the land was desirable for agricultural purposes. The worst feature of the Homestead law was its estension over land not adapted to it. It was designed for the western part of the humid belt of prairie land and by no means for the arid and the forested regions, yet many a useless homestead was taken in the arid sections, and many a quarter-section of land valuable for timber only was secured through the farce of homestead requirements.

Speculation ran riot because there was no way devised for holding it in check and because great tracts of land at a low price are always tempting to the man with money to invest. Not many great estates were formed out of this cheap land. It was nearly always the purpose of the speculator to sell within a short time. Since the buying of great holdings was largely several years in advance of settlement and no small part of it in boom years such as 1835 and '36, and again just preceding 1857, the speculator was in the majority of instances disappointed. He sold out for what he could get, and few fortunes were made. Nevertheless, the process resulted in making the settler who eventually came to till the soil pay a higher price for the land than would have been necessary had it been held by the Government until such time as it was wanted for real use.

The policy most open to criticism is that of granting such principalities to railways companies. No doubt the policy encouraged railway building, but no doubt also railways were built too rapidly. They anticipated business by too long a period,were built by men who had had little or no experience in the railway world, and were destined to fail. There is abundant evidence to show that railways could have been built, and would have been built in all but a few cases, as soon as there was much need for them, without the great gifts of land.

One sorry effect of the great liberality of the land policies by which settlement was encouraged, and almost never restrained, was the almost unbelievable rapidity of settlement of the western country. Population and grain production doubled throughout the great grain states in periods of about 20 years, and this at a time in the development when it meant the addition to the farm area of 50 or 60 million acres of farm land and six or or eight millions of people per decade. The result was ruinously low prices and a discouraged and restless farm people.

There were no colonization plans such as have been followed in various other countries. The settlement was strictly on the *laissez faire* plan. Settlers took their chances of being able to get community privileges. Whether they had schools, churches, or markets depended on their own sagacity and good fortune.

The people who settled the western country were from our eastern states and in no small measure from Europe, although the newly arrived immigrant was seldom on the very extreme of the frontier. Without important exceptions the first settlers were poor. Few people who possessed even a few thousand dollars left their old homes to make new ones in the wilderness. Often such people followed along a few years later and bought out for a few hundred dollars the farms of the frontiersmen who in turn moved on and repeated the programme of settlement of new land.

The United States can hardly be said to have had or to have a land policy. The great share of the public domain has passed into private hands. It is idle to expend much energy in speculating on what might have been done in a better way. In a rather blind manner Congress throughout a hundred years of time was trying to get the public domain into the hands of settlers. During the first third or more of that period it was hoped that incidentally a goodly revenue would be derived from it. During two-thirds of the period there was a strong feeling that the amount of land was inexhaustible. At times there was fraud and graft, but this was the exception so far as Congress itself was concerned. That fraud was practised upon the Government many times is beyond doubt.

The lack of a policy is the most conspicuous occasion for criticism of the acts of Congress relating to the federal domain. Politics often payed the major rôle. At present what is needed is a plan by which the Government may administer the affairs of the land yet in its hands in such a manner as to result in putting it into the hands of people who will use it for production instead of exploitation. Likewise the state governments need land policies both with respect to land which they still possess and land which in private hands is being used with a view to speculative gains to the present owner, resulting in hardship to the man who actually undertakes to turn a portion of it into a farm.

FRANCE.

LAW OF OCTOBER 16th, 1915, ON THE PURCHASE AND SALE OF WHEAT AND FLOUR FOR THE SUPPLY OF THE CIVIL POPULATION.

OFFICIAL SOURCES:

LOI DU 16 OCTOBRE 1915 PORTANT OUVERTURE AU MINISTRE DU COMMERCE, DE L'INDUSTRIE, DES POSTES ET DES TÈLÈGRAPHES, SUR L'EXERCICE 1915, DE CRÉDITS ADDITIONELS AUX CRÉDITS PROVISOIRES, POUR PROCÉDER A DES OPÉRATIONS D'ACHAT ET DE VENTE DE BLÉ ET DE FARINE POUR LE RAVITAILLEMENT DE LA POPULATION CIVILE, ET TRAVAUX PRÉPARATOIRES. (*Law of October 16th* 1915, *Opening Credits Additional to the Provisional Credits, for the Minister of Commerce, Industry, Posts and Telegraphs, for the Year* 1915, *for operations of Purchase and Sale of Wheat and Flour for the Supply of the Civil Population, and Preliminary Work*).

DECRET DU 16 OCTOBRE 1915. (*Decree of October 16th.*, 1915).

INSTRUCTIONS MINISTERIELLES DU 16 OCTOBRE 1915 RELATIVES À L'APPLICATION DE LA LOI. (*Ministerial Instructions of October 16th.*, 1915 *in regard to the Application of the Law*).

The conditions under which the supply of the civil population with wheat and flour is effected is a matter very intimately affecting the essential interests of the country; consequently, under the existing circumstances, it has especially occupied the attention of the authorities. The Government and the Parliament have examined these conditions at length, and as the final result of their examination the Law of October 16th., 1915, was passed, opening credits for the year 1915 to the Minister of Commerce, additional to the provisional credits, for operations of purchase and sale of wheat and flour for the supply of the civil population.

The essential provisions of this law, which is to remain in force while the war lasts, relate to the following matters:

The prefects or their deputies may provide for the supply of the civil population with wheat and flour, by means of requisitions; the requisitions shall be made by authority of the Minister of Commerce.

The price of flour shall be fixed, either by Government Decree or by order of the Prefects, when this authority is delegated to them.

Finally the Minister of Commerce is charged to make purchases of grain and flour and distribute these articles according to the needs of the consumers by way of transfer.

§ 1. General observations.

Requisitioning, in terms of the first section, must be authorized by the Minister of Commerce. Consequently, if the state of the supplies of a department seems to call for action of this kind, the prefect shall report to the Minister stating the reasons that might influence him in his decision.

As a general rule, the right of requisitioning belongs to the prefects; they may, however, delegate their power to the sub-prefects or presidents of the receiving commissions for the service of supply.

However, it must never be forgotten that requisitioning is only a procedure of exceptional character. The prefects must, therefore, have an accurate knowledge of the stock in their departments and supervise the use of the same for the supply of the public. In the relations they shall endeavour to establish between holders of wheat and flour and the purchasers, they shall try first of all to facilitate private sales immediately between those interested and then, with the co-operation of the receiving commissions of the service of supply, proceed to purchases "à caisse ouverte", as they are styled, which are in reality only private purchases. Only when both these methods have failed to give results to meet the situation is it necessary to have recourse to requisitions.

With this object, the prefects must keep themselves informed through the railway administrations of the consignments of wheat and flour from the territory of their department. In case these consignments seem to them abnormal, and difficult to explain on the ground of the requirements of the regions to which they are directed, or of a nature to render difficult the supply of their department, they must collect information by means of an enquiry, and, if necessary, inform the central government.

§ 2. Goods which can be requisitioned.

In granting the prefects power to requisition with the authorization of the Minister of Commerce, the law does not limit their power to such or such a class of goods; the right to requisition is general; it applies to every kind of wheat, whether grown on French soil or imported. And so also in regard to flour.

Wheat or flour may also be requisitioned from every holder of them, whether farmer, dealer or miller, and there are no exceptions made. It is, however, evident that requisitions must be made by preference from stocks in commercial warehouses. But there are certain exceptions to this rule.

First of all, of course, the foreign wheat the Government may have transferred must not be subject to requisition, whoever may hold it.

The object of the requisitioning is, in fact, that the articles requisitioned be used as food for the public; naturally wheat thus transferred has already this destination, and there would be no object in requisitioning it.

For the same reason, wheat and flour purchased by the departments, the communes or the chambers of commerce for the supply of the civil population cannot be requisitioned.

In the same way wheat set apart for autumn and spring sowing can under no pretext be requisitioned.

In a fairly large number of departments of agricultural regions, it is usual for the farmers' families to keep out of their crop the proportion they require for their consumption until next season. This wheat is sent from time to time as required to the miller in the neighbourhood who sends it back as flour, which is generally baked in the house. Such wheat and flour are not to be requisitioned. Otherwise, it would be necessary to return to the peasants, under another form and at a higher price, the amounts so requisitioned.

The question has also been raised whether wheat and flour forming the object of contracts of sale in course of esecution can be requisitioned. No legal provision or regulation prevents their being so. But the Minister considers that, in practice, it is advisable, except in cases of absolute urgency, to use a certain moderation in the matter so as not to interfere with regular business.

Finally, it has been definitely stated in the course of the Parliamentary Debates and especially in the session of the Chamber of Deputies of October 15th., 1915, that requisition must be made only of wheat intended for making bread, and not of hard wheat for the manufacture of pastes (semolina, vermicelli, etc.) Such grain will, therefore, remain subject to the provisions of common law.

§ 3. Consumers to be satisfied by means of requisitions and the method of requisitioning.

The amounts bought or requisitioned by the Prefects or their deputies are intended to meet the requirements of the civil population, properly so called. However, it is usual to supply the depôts of the land army and the naval forces in the harbours out of the produce of the country. Consequently a decision come to between the Ministers of Commerce, War and the Marine, provides that, in the absence of contracts already made, the amount required for these supplies be obtained from the stocks bought or requisitioned by the prefects, with whom the naval and military commissaries of stores must arrange for the purpose.

As a result of this decision, requisitions of wheat and flour can only be made by the prefects or their deputies.

So long as the prefects limit themselves to facilitating private understanding between the holders of wheat or flour and the purchasers, the steps to be taken are left entirely to their discretion.

In regard to purchases "à caisse ouverte" and requisitions the rules laid down in similar cases are followed. However, in actual practice, some simplifications have been introduced as a result of experience, and in view of the object to be attained. Thus, whenever analogous operations to be conducted by the Military authorities will not be thus complicated the holders of wheat or flour shall not be obliged to travel to the centres for supply when the business can be transacted at the place where the goods are deposited.

In case of purchases "à caisse ouverte," payment must be made at once, in conformity with the military regulations. In the case of requisitions, instructions will be given by the Minister of Finance that payment be made at as early a date as possible.

When wheat or flour has been requisitioned, the Government recommends that it be not deposited in a warehouse, except in case of necessity. Such a measure, indeed, may only cause complications, expense and loss. It will be advisable only to take possession of the stocks required for the supply of mills and bakeries, as they become necessary.

As the object is to place wheat at the disposal of the mills, or flour at that of the bakers, the sacks must be supplied by the persons concerned.

§ 4. Prices of requisitioned grain.

Section 21 of the law provides that the compensation that may be given in case of requisition, either by the administrative authority or by the law courts, shall not exceed 30 fr. per 100 kg. for wheat weighing 77 kg. the hectolitre and not containing more than 2 % foreign matter. For each kg. more or less per hectolitre an increase or a reduction of 1 % shall be made, and a reduction of 1 % shall also be made for every additional one per cent of foreign matter.

From the above we see that a maximum price is only provided for in the case of wheat requisitioned. But the intention of the law was also certainly to prevent prices fixed in the course of private business from varying too considerably from what would seem to be the legitimate remuneration for the farmers' work and expenses.

It may be expected that the mere possibility of requisition under legal conditions will suffice to hinder the prices fixed privately from exceeding the limit of the requisition price, as no one will care to buy at rates higher than those at which the same goods can be requisitioned. In case of the contrary happening, the right of requisition would be resorted to to obtain quantities which had fetched prices that must be considered excessive.

The legal price of 30 fr. is fixed for wheat weighing 77 kg. the hectolitre and not containing more than 2 % foreign matter. When the wheat does not satisfy these conditions the price rises or falls. The following table shows the changes in price under different conditions:

Table of Prices of Wheat according to Specific Weight and Amount of Foreign Matter.

Specific weight of wheat per hectolitre	Amount of Foreign Matter				
	2 %	3 %	4 %	5 %	6 %
80 Kilograms	30.90	30.60	30.30	30.00	29.70
79 »	30.60	30.30	30.00	29.70	29.40
78 »	30.30	30.00	29.70	29.40	29.10
77 » (Base)	30.00	29.70	29.40	29.10	28.80
76 »	29.70	29.40	29.10	28.80	28.50
75 »	29.40	29.10	28.80	28.50	28.20
74 »	29.10	28.80	28.50	28.20	27.90
73 »	28.80	28.50	28.20	27.90	27.60
72 »	28.50	28.20	27.90	27.60	27.30
71 »	28.20	27.90	27.60	27.30	27.00
70 »	27.90	27.60	27.30	27.00	26.70

The expression employed in the law " foreign matter " has a technical meaning in conformity with commercial usage. It indicates all grain, seeds or other objects which are not wheat, but grains of wheat that are poor, hard, tending to hardness, broken, etc., are not considered.

The price fixed by the law is for wheat acquired at the farm. But in addition to the wheat requisitioned on farms, it may be necessary to requisition wheat from the dealers. In that case, the price of 30 francs, whether the wheat be homegrown or imported, is charged on wheat acquired in the stores or warehouses, without any additional allowance for transport to these stores or warehouses. Consequently, the requisition price can only be increased by charges for transport after requisition.

§ 5. Fixing the price of flour.

In Section 8 the law lays down the rules for fixing the price of flour. In virtue of this article, a decree was issued delegating to the prefects the necessary powers for establishing the price of flour.

The price of flour is established, in effect, not merely in relation to the price of wheat, but in relation to other matters, often varying with the district and even with the season : price of offal, equipment of mills, kind of motor power, cost of labour, etc.

It was thought that the prefect was in the best position to appreciate these various circumstances and the relations existing between them. The prefects have in consequence been invited to issue decrees in regard to the price of flour.

In accordance with Section 8 of the law, the maximum price for flour must not exceed that resulting from the extraction of 74 %.

In fixing this price account must be taken of the following different elements affecting the cost price:

Percentage of flour extracted and yield;

Price of wheat delivered at the mill;

Market price of offal;

Milling charges (including profit).

(1) *Rate of Extraction of Flour and Yield.* — The rate of extraction is the percentage of flour extracted from wheat by grinding. According to Section 8, 74 kg. of flour should be extracted from wheat weighing 77 kg. the hectolitre and not containing more than 2 % foreign malter.

The yield would then be established as follows:

74 % of whole flour;

24 % of offal;

2 % of loss through foreign matter.

(2) *Price of Wheat Delivered at the Mill.* — The price of wheat which is to serve to fix the price of flour is that fixed by the law for wheat weighing 77 kilogrammes per hectolitre and not containing more than 2 % foreign matter, that is to say 30 fr. per 100 kilograms.

If the wheat weighs less than 77 kilograms per hl. or if it contains a larger percentage of foreign matter 100 kg. will no longer be worth 30 francs; consequently the miller will pay less per quintal, or if he pays the same amount of 30 francs, it will be for more than 100 kg., but, in either case, the value of 74 kg of flour, extracted from this inferior quality wheat connot be estimated at more than that extracted from 100 kg. of wheat corresponding with the legal definition.

If, on the contrary the wheat weighs more than 77 kg., or contains less foreign matter, a smaller quantity of it will be required per quintal to give 74 kg. of flour, or a quintal of the wheat will give more than 74 kg. of flour but, supposing the wheat to be of inferior quality, the market price of the flour will not vary whatever the quality of the wheat may be.

The value of home grown wheat will be increased by the cost of carriage to the mill.

(3) *Market Price of Offal.* — The market price of offal will be that of the markets of the region.

(4) *Charges for Milling.* — The charges for milling (including the ordinary profit) form the "écart de mouture." This is essentially variable, according to the regions, the situation of the mills, their size, the motor power available, the cost of labour and other general expenses.

A method commonly in use is to leave the offal to the millers, as milling expenses. If this is done, the price per kilogram of the flour is obtained by dividing the price per 100 kg. of the wheat delivered at the mill by 74.

If this method is not followed, the various elements of the cost price being defined as above, taking S as the price per kg. of offal, A as that of 100 kg. of wheat delivered at the mill, E the milling charges and x the cost price per kg. of flour, the price of the flour may be obtained from the following formula.

$$74\,x + 24\,S = A + E.$$

whence

$$x = \frac{(A + E) - 24\,S}{74}$$

We reproduce two cases which have been given as examples:

(1) Price of 100 kg, of wheat delivered at the mill: 30 fr. 50.
Market price of offal: 10 fr. per quintal.
Milling charges: 1 fr. 75.

$$x = \frac{(30{\cdot}50 + 1{\cdot}75) - (24 \times 0{\cdot}10)}{74} = 0{\cdot}4033,$$

The price of 100 kg. of flour will be 40 fr. 33.

(2) Price of 100 kg. of wheat delivered at the mill: 30 fr. 50.
Market price of offal: 10 fr.
Milling charges: 2 fr.

$$x = \frac{(35{\cdot}50 + 2) - (20 \times 0{\cdot}10)}{74} = 0{\cdot}4067.$$

The price of 100 kg. of flour will be 40 fr. 67.

To these prices must be added, when necessary, the costs of carriage and sale to the baker.

The following table shows the price of flour corresponding with the various prices of wheat and of offal.

Table showing Cost Prices of Flour.

Supposing . . . .
- the price of wheat to be 30 fr. per 100 kg.
- the cost of carriage of the wheat to the mill, per 100 kg. to be 0.25 fr. / 0.50 fr. / 0.75 fr.
- the market price of offal to vary from 8 fr. to 14 fr.
- the milling charges, per 100 kg. to be . . . . . 1.75 fr. / 2.00 fr.

Price of offal	Price of wheat and carriage							
	30 fr. — Milling charges		30 fr. 25 — Milling charges		30 fr. 50 — Milling charges		30 fr. 75 — Milling charges	
	1 fr. 75	2 fr.	1 fr. 75	2 fr.	1 fr. 75	2 fr.	1 fr. 75	2 fr.
	fr.	fr.	fr.	fr.	fr.	fr.	fr.	fr.
8 fr.	40.31	40.64	40.64	40.98	40.98	41.32	41.32	41.66
8 fr. 50	40.15	40.48	40.48	40.82	40.82	41.16	41.16	41.50
9 fr.	39.98	40.32	40.32	40.66	40.66	41.00	41.00	41.34
9 fr. 50	39.82	40.16	40.16	40.50	40.50	40.83	40.83	41.18
10 fr.	39.66	39.99	39.99	40.33	40.53	40.67	40.67	41.01
10 fr. 50	39.50	35.82	39.82	40.17	40.17	40.51	40.51	40.85
11 fr.	39.33	39.68	39.68	40.01	40.01	40.35	40.35	40.68
11 fr. 50	39.17	39.52	39.52	39.85	39.85	40.19	40.19	40.52
12 fr.	39.01	39.35	39.35	39.69	39.69	40.03	40.03	40.36
12 fr. 50	38.85	39.19	39.10	39.53	39.53	39.86	39.86	40.20
13 fr.	38.66	39.03	39.03	39.37	39.37	39.76	39.70	40.04
13 fr. 50	38.52	38.86	38.86	39.21	39.21	39.54	39.54	39.88
14 fr.	38.36	38.70	38.70	39.04	39.04	39.37	39.37	39.71

While the law intended that the millers should extract all the flour contained in the wheat, it none the less meant that the flour should keep the qualities which give bread its appearance and its properties. Therefore in Section 8 it is laid down that whole flour shall not include bran of either the first or second milling.

Just as Section 2 only contemplates wheat for bread making, so also Section 8 only applies to flour for bread making. It does not regulate the products of hard wheat for the manufacture of pastes and there is no need to estimate the value of such products.

§ 6. Fixing the price of bread.

The law contains no new provision in regard to the price of bread which remains, consequentiy, regulated by previous laws, of which we give the provisions belows :

(1) Section 30 of the Law of July 19th. and 22nd., 1791: The price of the means of subsistence cannot be provisionally fixed in any town or domain of the Kingdom except in the case of bread and butchers' meat, and in no case is permission given to fix that of wine, wheat or other grain or other kinds of produce, under pain of destitution of the Municipal officers;

(2) Section 479 of the Penal Code: Bakers and Butchers selling bread or meat at rates above the price legally fixed and published shall be liable to a fine of from 11 fr. to 15 fr. inclusive.

(3) Section 480 of the Penal Code: According to circumstances the penality of imprisonment not exceeding five days may be imposed on butchers and bakers in the cases contemplated in the preceding Section.

(4) Section 482 of the Penal Code: The persons mentioned in Section 479, guilty of the offence therein mentioned, shall always be liable in the case of a second offence to be imprisioned for five days.

§ 7. Circulation of wheat and flour: transfers of wheat.

The supervision and inspection exercised by the prefects in regard to the operations relating to wheat and flour must in no way hinder the free course of the trade, independently of the exercise of the right of requisition.

It follows especially that departments that have been accustomed to obtain wheat or flour from other departments may continue to obtain their supplies as previously and in departments in which there are milling businesses the production of which is partly intended for the neighbouring departments, the mills in question shall continue to work and execute the orders received.

With the object of guarding against an insufficient supply of wheat for the consumption of the civil population, the law authorizes the Minister of Commerce to make transfers of wheat. The Government has already resorted to this method to meet the requirements of a very large number of departments. Where there has been a special want of flour, wheat has been delivered direct to the mills indicated by the prefects of the departments, to be mound for the account of the departments.

Thus, as above explained, wheat so transferred cannot be requisitioned.

The following are the essential rules for these transfers:

(1) The wheat is transferred to the departments, communes and chambers of commerce, which engage to sell it again to satisfy the requirements of local consumption. However, the departments, communes or chambers of commerce are freed from the obligation of reselling the wheat, when they have made contracts with the millers; in that case they must sell the flour to the bakers. However, transfers may be made direct to private persons at the request of the prefects, when neither the department nor the communes nor the chambers of commerce are in a position to assume the position of receivers.

(2) Applications for wheat and flour must be forwarded to the prefects, who shall advise the service for the supply of the civil population. The Central Government shall decide in regard to these applications and instruct the prefects concerned in regard to the quantity and quality to be consigned, the price of the articles and the warehouse instructed to make the consiguments.

(3) As these transfers are intended to secure the maintenance of the price of bread at a regular rate, it is of importance that no speculation in regard to the matter should be possible. Consequently, the communes, departments or chambers of commerce are urged to see that the quantities of wheat transferred are really utilised by the millers to whom they have sold them. They shall further assure themselves that the millers have actually delivered the corresponding amounts of flour at a price not above that fixed by them.

Any infringement of these regulations shall prevent those concerned from participation in transfers that may be subsequently made and if need be the goods shall be taken from them.

(4) The price of the wheat is fixed per 100 kgs. net on delivery, that is to say in truck or on board ship, at the landing place. The costs of transport from the harbour to the place of destination are charged against the consignees.

(5) The sacks are lent and must be returned in good condition within a month. However, the consignees may send their own sacks beforehand to be filled.

(6) The amount of the price to be paid for wheat transferred shall be paid into the general treasury of the department, or the office of the collector of taxes of the arrondissement within twenty days from the arrival of the goods at their destination, after sight of orders for payment delivered by the Minister of Commerce to the consignees through the prefects. The general treasurer for payments concerned shall be advised by the supply service of the consignment of the orders of payment by means of a duplicate of the summary memorandum accompanying the orders of payment addressed to the prefect.

(7) In case of a transfer to a private person, payment must be made before delivery.

NOTICES OF SOME RECENT PUBLICATIONS RELATING TO AGRICULTURAL ECONOMY IN GENERAL.

SPAIN.

VISCOUNT DE EZA: EL PROBLEMA AGRARIO IN ESPAÑA (*The Agrarian Question in Spain*). Printed by Bernardo Rodriguez, 1915. 1 vol. 8vo, pp. 304.

This book is, so far as we know, the most profound and complete work published in Spain in modern times on the more important questions connected with Spanish agriculture. The merits of the book are due to the special competence of the author to treat of the subject. The Viscount de Eza is in fact one of the most remarkable personalities in Spanish rural circles. Himself a landed proprietor and agriculturist, he has for many years been President of the General Association of Spanish Agriculturists, and for some time Director General of Agriculture. He is at present a member of the Cortes.

It will be easily understood that his proposals for social agricultural legislation have been received with great interest. The work in question will doubtless occupy an eminent position in the agricultural literature of Spain, for it contains a systematic statement of observations made by the author both in rural districts and in the sphere of government on the agricultural question, which is so important for Spain.

The book is divided into three parts. The first gives an outline of the agricultural features of the country and points out the chief factors in the question ; the second deals with the social and legislative reforms which the author considers necessary to give an impulse to agricultural progress ; the third is devoted to the social factor in the solution of the agricultural question.

It is impossible, within the limits of a short analysis, to point out all the facts, theories, and opinions expounded in this book, but in a future article we shall give due attention to social-agricultural questions in Spain. We shall then describe more fully the contents of the book, but for the present we must confine ourselves to the principal points.

Speaking of the agricultural character of Spain, the author relies on his own direct observation as well as on official publications in affirming that although, in a more or less distant past, the land of Spain was once as fertile as has been generally believed, yet at the present day it rarely

attains such a high degree of fertility. The author adopts the classification of Malladas (10 % of barren land, 35 % of bad land, 45 % of comparatively unproductive land, and 10 % of good land), but he refers those who desire an exact description of the physical geography of Spain to an article in this *Bulletin*, by Sr. Enrique Alcaraz, engineer (1), according to which the first element for the solution of the agricultural question is the restoration to its original fertility of land now for the most part barren.

But it is not more necessary to make land yield the maximum of produce by the best adapted crops than to establish upon it the greatest possible number of families to re-people as well as to cultivate it. The author also reminds us that rural landed property in Spain, whether belonging to the State, to municipalities or other corporate bodies, or to private individuals, may be divided into two great groups, — the one comprising that which is excessively subdivided and parcelled out, the other those estates which are so large that the financial resources of their proprietors will not admit of the rational cultivation and gradual improvement of which they are capable.

The second element of the question, Viscount de Eza says, is the defective distribution of rural holdings. In some cases the land instead of being in the hands of agriculturists who might restore its lost fertility, is held by men who only impoverish it, whether proprietors without the necessary capital or desire for improvement or those who are bound to the land by a short-term and burdensome contract.

But to carry out successfully the work of restoring fertility to the land, there are three requisites — the State, association, and the individual. That is to say, it is necessary to have, as a third element which shall co-ordinate and maintain agricultural progress and establish a logical relation between property and the rural population from a social and technical point of view, all those institutions which give greater productivity to the factors of production — land, capital and labour.

This is the form in which the problem in its general outlines is stated by the author of the book under consideration. He afterwards points out that the measures which should be taken by the State to solve the problem in its various aspects are : the redistribution of estates which are too much parcelled out or divided ; the division of *latifundia* and large uncultivated tracts of land by means of home colonisation ; the construction of secondary railways and drainage works, etc. ; the reform of the laws of tenure and succession ; the organisation of agricultural credit on the basis of association ; and the establishment of a central official organisation which shall undertake to put into circulation in country districts the deposits received by the ordinary banks, and shall at the same time administer the " Pósitos," adapting them to modern requirements ; and lastly, the organisation and diffusion of agricultural instruction, and the adoption of a customs policy in relation to the needs and legitimate aspirations of agriculture.

The influence of the social factor upon the solution of the agrarian

(1) Issue of December, 1912.

question is considered under two aspects: firstly, the advantages which might result if it took the place of the administrative element, or still better, if they worked together to encourage agriculture; secondly, the need of incorporating the social factor with the principle of association and co-operation in order to complete the personality of the agriculturist considered as a producer and as a citizen.

If, on reading the title of the work thus briefly analysed, one expected to find in it a detailed statement of facts, supplemented by a wealth of statistics, one would be disappointed. The author, as agriculturist and as member of Cortes, only proposed in writing this book, to draw up what he modestly describes as "an outline of what may constitute the task of the Cortes," though it is in reality a systematic account of principles and theories connected with each of the chief questions that form an integral part of the agrarian problem in Spain. He treats the facts determining such questions as already known and proved. The absence of documents and statistics is perhaps the only thing in the book which could give rise to adverse criticism. If these had been supplied by the author, the result would have been a book of reference on the subject. However, in addition to the depth of observation and the ability with which some of the questions are solved, the work of the Viscount de Eza has the merit of giving a clear and complete insight into the agrarian question of Spain under its chief aspects.

UNITED STATES.

GILLETTE (JOHN M.) and DAVIES (GEORGE R.): MEASURE OF RURAL MIGRATION AND OTHER FACTORS OF URBAN INCREASE IN THE UNITED STATES.

CLARK (EARLE): CONTRIBUTIONS TO URBAN GROWTH. Articles in "Quarterly Publications of the American Statistical Association." New Series, No. 111. September, 1915, pp. 642-653 and 654-671.

The fact that vital statistics in the United States are only partially and imperfectly collected often makes it, on the one hand, difficult to ascertain with anything like definiteness the causes underlying changes in population revealed by Census enumerations, and, on the other hand, makes it correspondingly easy for superficial students of the question of population to fall into error as to the relative importance of the different causes which have produced a certain change, and consequently into further error with respect to the significance of the change itself. This is particularly well illustrated in connection with the question examined in these two articles in the "Quarterly Publications of the American Statistical Association," the question, namely of the composition of the increase in urban population which took place between 1900 and 1910. It is known in a general way that a large part of the urban increase is due to immigration and that another large part is due to migration from the country districts into the

towns. What is *not* known is the relative importance of these two factors and of the other factors which have contributed to the increase; and it becomes a simple matter, therefore, for one writer (if it suits his argument) to attribute 90 per cent. of the increase to foreign immigration and 10 per cent. to the rural exodus, and for the next writer to invert the percentages when he wishes to prove that all the country people are crowding into the towns.

The writers of the present articles attempt a scientific analysis of the urban increase between 1900 and 1910, working out their estimates from data furnished by the Census and immigration returns and such vital statistics as are available. We shall not attempt to follow their methods in detail, merely noting that in both cases the migration from rural to urban districts is arrived at as the residue of the total urban increase, there being no method whereby it might be directly estimated.

The authors of the first article arrive at the following results: Accounted for by immigration 41 per cent.; Natural increase of population 21.6 per cent.; Due to incorporation of new territory with urban territory 7.6 per cent.; Balance: Migration from rural districts 29.8 per cent. In the second article Mr. Earle Clark (neglecting changes in the area classed as urban) arrives at the following estimate: Natural increase 27.3 per cent.; Alien immigration, maximum 37.1 per cent. minimum 30.0 per cent.; Migration from country to urban districts, maximum 42.7 per cent., minimum 35.6 per cent.

GREAT BRITAIN AND IRELAND.

GREEN (J. L.): VILLAGE INDUSTRIES. London, 1915. The "Rural World" Publishing Co.

Mr. J. L. Green, who has been for many years the Secretary of the Rural League, an association which aims primarily at improving the economic conditions of English agricultural labourers, advocates the revival of village industries chiefly with a view to providing the labourers with some form of supplementary employment during the autumn and winter months when they are not fully occupied on the land. But he has a further aim in view; he is of opinion that villages industries are an important adjunct to any scheme of rural colonisation. "Industries," he writes, "cannot take the place of agriculture as an employment agency for the revivification of rural life, but they are, or should be, a most useful addition to it."

Village industries Mr. Green divides into two classes — domestic industries and rural factory industries — and he makes many suggestions as to suitable work for either class of industry. In regard to rural factories, he illustrates the decentralisation of industry by reference to the numerous factories which sprang up in the neighbourhood of London in what were, twenty or thirty years ago, rural districts. Unfortunately these districts are rapidly ceasing to be rural, and Mr. Green expresses the opinion that it

ought to be made compulsory that every rural district in which factories are established should remain largely of that character. Unless this element of compulsion is employed it would be to a large extent useless to expect a genuine decentralisation of industry. To express his idea in other words, it would be a great advantage if the factories could be carried to the rural districts without destroying their rural character. The tendency, however, is to the creation of new urban centres, and nothing short of stringent legislation can stop this tendency.

Mr. Green discusses the methods by which new domestic industries can be introduced into the villages. For many industries the initial cost of tools and appliances is trifling ; small as it is, however, it is often more than the agricultural labourer can afford, and he suggests that village charity funds (of which there are thousands in England) might be drawn upon for the purpose ; that application might be made for a grant out of the Development Fund ; and that rural credit banks should be formed to assist the workers. A more novel suggestion is that the great Liveried Companies should be asked to contribute. The Liveried Companies are (or were originally) trade guilds, and some of them are still connected with the trades whose names they bear. They possess annual incomes, which in some cases are extremely large. These incomes, though spent on worthy objects, might in part, in Mr. Green's opinion, be even more usefully spent. " All we ask," he writes, " is that the Companies should more generally make financial grants towards the improvement or establishment of our industries, and should perform such further useful functions in connection therewith as a real interest in them would dictate. A sum of £20,000 as a donation and an annual subscription of £ 5,000 for at least a period of years would go a long way in establishing domestic industries in our villages, and it does not seem a large or unreasonable request to make. "

The marketing of the goods produced is also discussed. There are two possible methods. One method is for the villagers to dispose of their products direct to the wholesale firm or firms best in touch with the retail shopkeepers. The second method is for the producers to have a representative of their own, and this system Mr. Green prefers. To carry it into effect he proposes the establishment of a National Association, consisting of voluntary subscribers who seek no personal profit, or one limited to, say, 4 or 5 per cent., and he urges that such a society should be aided out of the Development Fund. It may be noted, in conclusion, that Mr. Jesse Collings, M. P., who contributes a preface to the book, is of opinion that a new organisation is not needed and that the functions of the proposed National Association could very well be carried out by the Rural League.

RUGGERI ALFREDO, gerente responsabile.

INTERNATIONAL INSTITUTE OF AGRICULTURE
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Part I: Co-operation and Association

AUSTRIA.

AGRICULTURAL CO-OPERATION IN SILESIA (*Continued*).

§ 2. AGRICULTURAL CO-OPERATION IN SILESIA FROM THE FOUNDATION OF THE FEDERATION OF AGRICULTURAL CO-OPERATIVE SOCIETIES IN SILESIA UP TO 1913 (1894-1913) (*Continued*).

B. — *Societies for distribution, production and sale.*

a) *Co-operative dairies.*

The number of co-operative dairies affiliated to the Federation of Agricultural Societies in Silesia at the end of 1912 was thirteen. They are all formed on the basis of limited liability and their shares are of the value of 5, 6, 10, 20, 25 or 100 crowns each. In one dairy the shares are of the value of 5 crowns; in three dairies, 6 crowns; in four, 10 crowns; in three, 20 crowns; in one, 25 crowns and in one, 100 crowns. Ten dairies are worked by steam; three by hand. The price paid for the milk to the farmers by the co-operative dairies rose in 1912 to an average of 14.4 centimes per litre; in 1911 the average was 12.9 centimes; the minimum price was 11.92 centimes.

The co-operative dairies of Silesia produce little else than butter, and for this the demand exceeds the supply. The following table gives the principal data concerning the general working of these dairies from 1903 to 1912.

TABLE XVI. — *Co-operative dairies.*

Year	Number of dairies	Worked by hand	Worked by steam	Number of members	Number of shares	Value of shares — Crowns	Quantity of milk bought — Litres	Production: Butter — kg.	Production: Cheese — kg.	Value: of buildings — Crowns	Value: of machinery — Crowns
1903	6	2	4	217	641	4,632	1,095,373	43,739	23,723	27,313	22,588
1904	11	3	8	470	1,346	11,248	2,137.534	73,808	20,703	61,303	102,510
1905	11	3	8	497	1,400	11,786	1,795,079	45,195	15,138	57,863	40,582
1906	11	3	8	505	1,499	12,073	2,039,712	69,052	23,324	63,235	40,038
1907	11	3	8	510	1,430	12,049	2,258,360	81,090	24,064	53,491	28,007
1908	11	3	8	514	1,450	12,474	2,203,714	76,885	31.547	49,350	32,375
1909	11	3	8	512	1,455	12,662	1,862,735	104,942	34,076	40,989	28,483
1910	11	3	8	485	1,344	12,278	1,918,607	80,738	53.650	45,919	16,546
1911	12	3	9	489	1,456	32,414	4,523,332	79,413	86,709	204,074	121,956
1912	13	3	10	508	1,477	33,002	4,796,623	94,817	127,102	200.309	94,177

(b) *Co-operative distilleries.*

At the end of 1912 the Federation included eight co-operative distilleries with a total of 284 members holding 885 shares, of the value of 270,831 crowns. The guarantee for each share varies from two to seven times its value.

The number of shares for which a member may subscribe and pay is fixed in accordance with the area of the land he holds. Special conditions, depending on the quantity of alcohol which each distillery is authorised to produce (*Kontingentverteilung*), the more recently formed societies being authorised to produce only small quantities, have a remarkable influence on the working of these societies. The accounts of the distilleries show that only three realise a profit and that all the others are carried on at a loss.

The profits of the three in 1912 fell to 1,372 crowns, and the losses of the five others rose to 17,094 crowns. Two only of these distilleries possessed a reserve fund, the total of which was 14,359 crowns.

(c) *Co-operative mills.*

The Federation of Agricultural Societies of Silesia includes only one co-operative mill which contained:

In	1909	30	members	holding	shares	to the value of	3,000 crowns
"	1910	29	"	"	"	"	2,900 "
"	1911	31	"	"	"	"	3,240 "
"	1912	23	"	"	"	"	3,340 "

In 1909 this mill realised a net profit of 372 crowns, and in 1910 of 462 crowns. The year 1911 closed with a deficit of 7,432 crowns, because of the destruction of the mill by fire. The mill reconstructed, the loss in 1912 was only 225 crowns and at the end of the year the reserve fund had risen to 4,350 crowns.

(d) *Cattle breeding societies.*

In 1912 two of these societies joined the Federation; one, that of Gross-Herlitz founded in 1904, the other at Barzdorf founded in 1911. The first contained:

In	1900	44	members	with	291	head of cattle	registered
"	1910	41	"	"	278	"	" "
"	1911	57	"	"	332	"	" "
"	1912	55	"	"	307	"	" "

The second contained in its first year (1912) 24 members, with 125 head of cattle registered. These two societies have always closed their financial year with loss; thus:

a) Gross-Herlitz	In	1909	with	396	cr.	of loss
	"	1910	"	1,063	"	"
	"	1911	"	577	"	"
	"	1912	"	532	"	"
b) Barzdorf	"	1912	"	379	"	"

(e) *Societies for the threshing of grain by steam.*

At the end of 1912 five of these societies joined the Federation and a sixth in 1913.

The Altstadt society founded in 1908, had seven members in 1910-11 and 5 in 1911-12 and its affairs were soon afterwards wound up. In 1910-11 it showed a deficit of 2,498 crowns, while in 1912 it realised a profit of 298 crowns.

The Altvogelseiten Society founded in 1910, contained in its first working year 24 members, holding 96 shares of the value of 4,800 cr. and its annual report showed a deficit of 275 crowns.

The following year, 1911-12, it had 23 members holding 99 shares of the value of 4,950 crowns. The accounts for the year showed a loss of 1,042 crowns.

The Glomnitz society had at the close of its first year (1912) 13 members holding 54 shares of the value of 5400 crowns. It reported a loss of 1,046 crowns.

The Albersdorf society, which had been in existence for three years had in 1910-11, thirty, seven members and reported a deficit, of 169 crowns.

The Wagstadt Society, which had also been in existence for three years, numbered 39 members in 1910-11 with a capital of 8,100 crowns in shares; in 1911-12 there were 36 members, but the capital in shares remained unchanged. In 1909-10 there was a profit of 909 crowns, but in 1910-11 and 1911-12 there were losses respectively of 414 and of 258 crowns.

(f) *Co-operative distributive societies.*

At the end of 1913 the three distributive societies Barzdorf, Karpentna and Kronsdorf had joined the federation. The following table shows their position during the period 1909-1912.

a) Barzdorf	1909	members	196	with	7,267	cr.	of	capital	in	paid-up shares
	1910	»	199	»	7,004	»	»	»	»	»
	1911	»	211	»	7,026	»	»	»	»	»
	1912	»	223	»	7,118	»	»	»	»	»

b) Karpentna	1909	members	35	whit	668	cr.	of	capital	in	paid-up	shares
	1910	»	35	»	668	»	»	»	»	»	»
	1911	»	34	»	638	»	»	»	»	»	»
	1912	»	31	»	618	»	»	»	»	»	»
c) Kronsdorf	1910	»	72	»	1,057	»	»	»	»	»	»
	1911	»	103	»	1,604	»	»	»	»	»	»
	1912	»	113	»	2,457	»	»	»	»	»	»

The balance-sheets of these Societies furnish the following data:

a) Bazdorf.

		Crowns		Crowns		Crowns
		—		—		—
1909	Total business done	150,120,	profit	5,857,	reserve fund	3,865
1910	» » »	173,755,	»	5,838,	» »	4,451
1911	» » »	161.461,	»	6,133,	» »	5.034
1912	» » »	—	»	6,986,	» »	5,648

b) Karpentna.

1909	Total business done	40,680,	profit	33,	reserve fund	67
1910	» » »	41,157,	»	18,	» »	125
1911	» » »	52,906,	»	43,	» »	121
1912	» » »	56,313,	»	84,	» »	203

c) Kronsdorf.

1910	Total business done	32,563,	profit	288,	reserve fund	73
1911	» » »	84,220,	»	2,039,	» »	132
1912	» » »	112,833,	»	777,	» »	239

(g) *Alpine Societies.*

Three Alpine societies belong to the Silesian Federation. The Lichtewerden society in 1911 contained 35 members with a capital in paid-up shares of 2,650 crowns, and showed a profit of 4,328 crowns. In 1912 the number of members rose to 57, holding shares to the value of 5,200 crowns The profit realised was 3,112 crowns.

The Ustron Society, founded in 1912, contained 19 members in its first year, with 950 crowns of paid-up capital and a profit of 289 crowns. The third society, that of Nieder Bladnitz, was not established until 1913.

(h) *Other forms of affiliated society*

Other societies belonging to the Federation are that of Neulublitz for flax growing, that of Ustron for mud-baths, and that of Teschen for purchase and sale. The balance sheets of these three societies always show a credit balance and a clear profit besides.

C. — *The Central Bank of the Federation.*

The Central Bank of the Federation was founded in 1894 ; its first financial year was therefore 1895. Like all other institutions of the kind it endeavours to equalise the credit required by the different rural banks, to supply money to those which need it and to invest the surplus. It carries on credit transactions under different forms, and with regard to credit and savings, it encourages not only rural banks, but also co-operative societies for distribution and production and other institutions of the kind. The Bank thus acts as a sort of clearing-house among co-operative societies, and seeks to give a certain stability to the rate of interest, so as to save agriculturists from the too violent oscillations of the rate in the higher branches of finance.

In Table XVII the variations of the rate of interest of the Central Bank may be traced from its foundation up to February 1st., 1914.

TABLE XVII. — *Central Bank: Rate of interest.*

Period	Rate of interest		Difference
	Deposits	Loans	%
From 1st. November, 1894	4 1/4	4 3/4	1/2
» 16th. March, 1896	4 1/4	4 1/2	1/4
» 1st. April, 1900	4	4 1/2	1/2
» 1st. December, 1905	4	4 3/4	3/4
» 1st. July, 1908	4	4 1/2	1/2
» » » 1910	4 1/8	4.6	0.475
» 1st. November, 1912	4.6	5.1	1/2
» 1st. September, 1913	4.6	6	1.4
» 1st. December, 1913	4.6	5 3/4	1.15
» 1st. February, 1914	4.6	5 1/2	0.9

Let us now briefly observe the movement of capital during the last two financial years of this institution.

The largest deposits of 1912 and 1913 were made in the following months:

1912		1913	
January	319,775 crowns	January	299,323 crowns
December	299,201 »	July	278,248 »
August	176,245 »	December	188,976 »
July	168,110 »	February	137,110 »

The smallest amount of deposits was received in March, 1912 (55,521 crowns) and in September, 1913 (68,814 crowns). The largest withdrawals of deposits in 1912 and 1913 were made in the following months:

1912		1913	
March	347,945 crowns	April	216,963 crowns
May	239,763 »	May	212,680 »
April	213,842 »	March	178,929 »
July	206,232 »	September	168,719 »

The smallest amount of withdrawals was in January, 1912 (94,524 crowns) and in January, 1913 (50,681 crowns).

In the two years under consideration the deposits exceeded the withdrawals in the following months:

1912		1913	
January	225,251 crowns	January	248,642 crowns
February	23,617 »	February	35,324 »
August	79,112 »	July	162,977 »
November	12,208 »	November	19,651 »
December	80,850 »	December	21,621 »

The withdrawals exceeded the deposits in:

1912		1913	
March	292,423 crowns	March	93,498 crowns
April	148,754 »	April	96,393 »
May	184,722 »	May	136,822 »
June	171,898 »	June	29,188 »
July	38,122 »	August	56,195 »
September	67,910 »	September	99,905 »
October	2,241 »	October	3,594 »

The total amount of the deposits paid into the Central Bank was:

In	1912	1,609,961	crowns
»	1913	1,684,688	»

and of the withdrawals:

In	1912	2,094,994	crowns
»	1913	1,710,979	»

Thus taking account of the deposits in hand at the end of the preceding year and deducting the withdrawals given above we obtain the amount of the deposits:

In	1912	3,555,469	crowns
»	1913	3,528,577	»

In 1913 the total amount of deposits exceeded that of 1912 by 74,128 crowns ; the withdrawals were less by 384,014 crowns than those of 1912, and the deposits in 1913 were only 26,890 crowns less than in 1912.

It thus appears that in 1913 the position in general as compared with the preceding year showed a certain improvement.

The movement of loan transactions has varied almost in the same way as that of deposits.

The total amount of loans granted by the Central Bank was :

In	1912	1,222,034	crowns
»	1913	773,313	»

The loans repaid amounted

In	1912	to	537,380	crowns
»	1913	»	806,209	»

The amount in cash in the loan section taking into account the sums remaining from preceding years rose

In	1912	to	2,596,173	crowns
»	1913	»	2,563,277	»

The largest loans were contracted in

1912		1913	
In July	203,131 crowns	In July	112,796 crowns
» June	133,516 »	» January	79,964 »
» Decemebr	125,378 »	» April	76,888 »

The smallest repayments were made in June, 1912 (21,417 crowns) and in March, 1913 (35 288 crowns).

The loans granted exceeded the repayments in:

1912		1913	
January	8,596 crowns	May	33,784 crowns
February	13,991 "	June	51,043 "
March	55,560 "	July	32,068
April	53,179 "	December	66,512 "
May	90,846 "		
June	112,099 "		
July	153,084 "		
August	71 "		
September	58,783 "		
October	18,938 "		
November	17,166 "		
December	102,364 "		

Waile in 1912 the repayments did not in any month exceed the loans, in 1913 they were in excess to the following amounts:

January	33,651	crowns	August	38,380	crowns
February	689	"	September	32,375	"
March	554	"	October	41,380	"
April	22,748	"	November	44,516	"

It will be seen that the movement of loans in 1913 also showed a slight improvement.

It may be noted that in 1911 twelve rural banks declared that they held government stock to the value of 304,754 crowns, while in 1912 eleven banks possessed 284,209 crowns in the same security. The investment of this floating capital in government stock was certainly unfavourable to the normal working of the Central Bank from which its available funds were thus taken during the most acute period of the agricultural and financial crisis. The Central Bank was accordingly compelled to increase its debt to the Austro-Hungarian Bank, obtaining once for all the credit necessary at the lowest rate of interest, because in Austria there is no central co-operative bank of the Empire. It must also be remembered that the rules of the Silesian Federation oblige the members to pay all available sums into the Central Bank; therefore the above mentioned investments cannot be justified.

As shown by the accounts of the Federation, the CentralBank, with the exception of 1905, a year of crisis, closed each financial year with a balance until 1912, having at its disposal large sums deposited in the banks. But in 1912 and 1913 the position changed. The need of credit felt to some extent everywhere caused a rapid diminution of the available funds, so that on the 10th. April, 1912, the Bank owed 5,065 crowns to the Austro-Hungarian Bank. This debt reached its maximum (632,840 crowns) on the 1st. July, 1913; at the end of that year it was reduced to 418,866 crowns.

The available funds in the Bank in 1912 and 1913 varied thus:

1912				1913			
1st January	Deposits	257,179	crowns	1st January	Debt	487,196	crowns
» February	»	398,580	"	» February	»	227,379	"
» March	»	399,358	"	» March	»	147,163	"
» April	»	119,304	"	» April	»	255,374	"
» May	Debt	61,041	"	» May	»	341,592	"
» June	»	121,607	"	» June	»	495,327	"
» July	»	319,002	"	» July	»	632,340	"
» August	»	433,142	"	» August	»	464,340	"
» September	»	376,763	"	» September	»	457,754	"
» October	»	447,239	"	» October	»	517,242	"
» November	»	449,688	"	» November	»	496,159	"
» December	»	426,290	"	» December	»	407,376	"
				31st December	»	418,865	"

For all further statistics respecting the manifold labours of the Central Bank of Silesia we have drawn up the recapitulatory table given below.

TABLE XVIII. — *Central Bank. General Position a*

Year	Number of members	Deposits — Crowns	Withdrawals — Crowns	Loans — Crowns	Repayments — Crowns	Position of Deposits — Crowns	Position of Loans — Crowns	Profits — Crowns
1895. . .	31	193,777	58,787	46,760	35,100	134,990	11,660	56
1896. . .	59	256,295	201,519	217,340	73,782	189,767	155,217	—
1897. . .	72	402,222	318,768	395,498	240,186	273,221	310.598	1,23
1398. . .	102	573,578	248,295	487,586	353,265	598,504	444,919	27
1899. . .	116	950,144	542,027	399,997	431,807	1,006,620	412,109	—
1900. . .	124	850,181	738,456	510,355	373,703	1,118,344	549,760	24
1901. . .	126	845,054	706,756	540,093	432,793	1,256,642	657,060	3,31
1902. . .	146	766,260	945,858	763,340	628,326	1,077,045	792,074	—
1903. . .	162	905,738	836,135	958.834	627,677	1,146,648	1,107,394	—
1904. . .	185	1,078,674	945,633	874.005	683.357	1,279,689	1,298,042	—
1905. . .	193	956,865	1,104,293	1,291,959	945,168	1,132.260	1,644,833	3,57
1906. . .	200	1,453,315	862,404	825,611	1,327,517	1,723,171	1,142,927	20,05
1907. . .	206	2,203,865	1,178,737	988,525	1,006,107	2,748,298	1,125,345	4,63
1908. . .	171	2,478,931	1,477,822	927,690	799,228	3,749,407	1,253,807	16,31
1909. . .	171	1,617,663	1,976,112	787.959	1,058,295	3,390,959	983,471	7,66
1910. . .	176	1,701,453	1,470,634	915,210	596,352	3,621,778	1,302,330	1,85
1911. . .	180	2,084,362	1,665,638	1,207,132	597,971	4,040,502	1,911,491	10,66
1912. . .	186	1,609,960	2,094,994	1,122,063	537,386	3,555,468	2,596,173	1,23
1913. . .	194	1,684,088	1,710,979	773,313	806,209	3,528,577	2,563,277	37

* Diminution due to the fact that the Polish rural banks ceased to be affiliated to the Federation.

The foregoing table shows the most important statistics as to the general position of the Central Bank from its foundation to the close of 1913. It has been drawn up with the help of the official data of the Bank and of special tables showing its financial condition and working.

It gives the number of members and the amount of the deposits and withdrawals, the position of deposits, loans, profits, losses, reserve fund, the total busines done, the balance in the Bank, the number of shares, the total amount of paid-up share capital, the guarantee fund, the number of inspections effected by the Bank, the total cost of such inspections and the average cost of one inspection year by year from 1895 to 1913.

lance from its formation up to the close of 1913.

osses — owns	Reserve fund — Crowns	Total amount of transactions — Crowns	Balance — Crowns	Number of shares	Amount of paid up share capital — Crowns	Guarantee fund — Crowns	Number of inspections	Total cost of inspections — Crowns	Average cost of one inspection — Cr.
—	290	483,172	141,374	112	5,530	27,650	7	140	20
133	954	944,895	200,752	224	10,030	50,150	26	760	29
—	1,175	1,548,534	326,576	276	13,480	67,400	14	600	42
—	2,227	1,980,407	619,623	396	18,130	90,650	28	880	31
710	2,718	3,193,204	1,032,307	452	22,480	112,400	42	1,370	32
—	2,197	2,697,164	1,151,296	484	23,730	118.650	68	2,060	30
—	3,299	981,968	1,288,339	493	24,670	493,400	62	1,966	31
8,815	6,914	5,217,214	1,117,964	611	30,580	611,600	47	1,760	37
8,483	7,380	4,782,947	1,400,380	657	32,870	657,400	68	2,190	32
4,081	7,882	5,212,874	1,591,977	730	36,090	721,800	85	3,210	37
—	8,240	5,976,381	1,978,505	3,712	37,260	745,200	74	2,650	35
—	8,603	21,119,789	2.108,785	3,832	38,460	769,200	95	3,995	42
—	23,396	17,907,280	2,901,201	4,909	49,230	984,600	93	4,122	44
—	31,199	19,897,533	4,711,673	3,671	51,550	1,031,000	107	4,702	43
—	32,712	15,265,327	4,335,722	3,760	54,320	1,086,400	71	3,050	42
—	36,150	15,827,869	5,140,636	3,823	55.930	1.118,600	76	2,536	33
—	39.506	17.062,750	5,684,668	3,965	40,860	817,200	75	3,134	41
—	41,817	17,563,026	5,678,422	4,345	45,080	901,600	86	3.157	36
—	44,825	13,857,742	5,622,887	4,560	45,900	918,000	85	3,140	36

We have now touched upon all the more salient and important points of the management and work of the Bank in so far as they have not been already discussed in the analytical inquiry previously made. In the table it is easy to follow the oscillations, the increase and diminution, the advantages and disadvantages in the various branches. It would therefore be a useless repetition to reproduce in the text what is so clearly shown in the columns of the table that closes this long article.

UNITED STATES.

CO-OPERATION IN MINNESOTA.

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SOURCES:

ANNUAL REPORTS OF THE MINNESOTA DAIRY AND FOOD DEPARTMENT. St. Paul, Minn.
MINNESOTA FARMERS' INSTITUTE ANNUAL, 1913. St. Paul, Minn.
WELD (L. D. H.): Statistics of Co-operation in Minnesota. Minnesota Agricultural Experiment Station Bulletin, No. 146.
WELD (L. D. H.): Farmers' Elevators in Minnesota. Minnesota Agricultural Experiment Station Bulletin.

INTRODUCTION: GENERAL CONDITIONS IN MINNESOTA.

Until recently very little has been done to collect statistics of co-operation in the United States, and it is commonly believed that development along this line among farmers is decidedly backward in this country. It is of course true that for the country as a whole co-operation has not made the progress that it has in many European countries, and yet there are certain states of the United States where the movement has developed to a rather surprising extent, especially in view of the newness of the country, the shiftings of the population and the mixture of nationalities.

The leading state of the United States, so far as co-operation is concerned, is Minnesota, a large state of 84,682 square miles, or only a little less than the area of Great Britain and Ireland. Minnesota is located in about the centre of the northern tier of states, and occupies almost the exact geographic centre of the continent of North America. The population in 1910 was 2,076,000, of which about 40 per cent. lived in places of 2,500 or over, leaving a "rural" population of about 1,200,000. The rural population

is found principally in the southern and western parts of the state, as the northern part still awaits development.

Of the total population, 26 per cent. are foreign born, but nearly three-quarters of the population are either foreign born or born of foreign or mixed parents. Of the foreign born, 22.5 per cent are from Sweden, 20.2 from Germany, 19.4 from Norway, and the remainder from various countries, the principal of which in order of importance are Canada, Austria, Finland, Russia, Denmark, and Ireland.

Agriculturally, Minnesota has always been pre-eminent in the raising of small grains. The northwestern part of the state is in the valley of the Red River of the North, one of the richest wheat-growing regions of the world. The southern part is in the " Corn Belt " of the United States, and the production of corn is increasing rapidly. Although small grains are still raised in great quantity, the one-crop system is giving way to a more diversified type of agriculture, and dairying and the raising of meat animals have become of great importance. Potatoes are raised in great quantity in certain sections, but little fruit is grown. The average size of farms in Minnesota is about 180 acres, of which on the average about 125 are improved.

These facts are recited because they all have a bearing on the development of co-operation. In 1913 the State Legislature passed an act requiring the Department of Agriculture of the University of Minnesota " to collect statistics and information in reference to co-operative associations among farmers and the management and methods of conducting such associations." It was enacted that it should be the " duty of all co-operative associations to report annually to said department on blanks provided for that purpose." The statistics and general information collected as the result of this law constitute the most thorough study of the co-operative movement that has been made in the United States, although other agencies are now at work to collect similar information for other parts of the country.

§ 1. Summary of co-operation statistics for 1913.

Statistics for 1913 have been published in bulletin form by the Minnesota College of Agriculture, and are summarised in the following table. In general the figures for the number of organizations apply to January 1, 1914, and those for the annual business to the calendar year 1913, although many companies reported for fiscal years ending during 1913, or early in 1914. The figures for co-operative elevators, for example, were largely for fiscal years ending in the summer of 1913, and covered the operations connected with marketing the crop of 1912. It should be explained that the figures for some organizations shown in the following table are largely estimated, but that they are sufficiently accurate to give a clear idea of the extent of the co-operative movement in Minnesota and of the great volume of business transacted by such organizations.

Co-operative Organizations in Minnesota: Number and Volume of Business

	Number (Jan. 1, 1914)	Volume of Business (1913)
Creameries	614	$21,675,252
Elevators	270	24,000,000
Live stock shipping associations	115	6,000,000
Stores	120	4,250,000
Fire insurance companies (1)	154	696,732
Telephone companies	600	900,000
Cheese factories	34	637,224
Potato warehouses	20	100,000
Miscellaneous	86	2,500,000
Total	2,013	$60,760,000

Among "Miscellaneous" organizations shown in this table are: cow-testing associations 11, fruit shipping associations 3, lumber yards 5, laundry 1, egg shipping associations 2, cattle and horse breeding associations 60, wool-growers' warehouse 1, terminal grain marketing company 1, butter marketing association 1, and terminal fruit and produce marketing association 1. More than four-fifths of the volume of business of these Miscellaneous companies was transacted by the terminal grain marketing company and the butter marketing association.

§ 2. Co-operative creameries.

The manufacture of butter is increasing in Minnesota by leaps and bounds, and it is in this field that co-operation among farmers has been of the greatest benefit. Butter is still manufactured to a large extent on the farms, but the great bulk of that which is marketed is made in creameries. These creameries are either local, depending on cream hauled in by farmers from the surroun ding territory, or "centralizers," which are large creameries generally located in cities, which obtain their raw material by rail from considerable distances, often from points 300 or 400 miles away. It is among the local creameries that co-operation has developed. In 1914, the 614 co-operative creameries constituted 72 per cent. of all creameries in

(1) Figures represent receipts from premiums, calendar year 1913.

Minnesota, and 42 per cent. of all farmers in the state were patrons of such creameries. Furthermore these 614 creameries constitute nearly one-third of all co-operative creameries in the United States, and nearly twice as many as are found in any other state.

Important facts about the co-operative creameries of Minnesota, which are taken from the 1913 Report of the Minnesota Dairy and Food Department, are as follows:

Total pounds of butter made in 1913 . . .	74,934,940
Average number of pounds per creamery . .	122,044
Total paid farmers for butter-fat	$19,988,321
Average paid farmers per creamery	$32,554
Total running expenses	$1,682,931
Expense per pound of butter made (cents) .	2.2
Total number of patrons.	65,181
Average number of patrons per creamery . .	106
Total number of cows belonging to patrons .	504,975
Average number of cows per creamery	822

The figures given above apply to all the co-operative creameries in Minnesota; those given below are derived from information given by nearly 300 of the 614 creameries, and are sufficiently representative of conditions throughout the state.

(i) *Features of Organization.*

It is commonly said that to be truly co-operative, an organization must have the one-man-one-vote principle, a limitation of the number of shares that each member may own, and the patronage dividend. Viewed in the light of these criteria, the facts concerning the co-operative creameries of Minnesota are as follows. In all but three per cent. the one-man-one-vote principle prevails; 65 per cent. limit the number of shares that one member may own; and about 20 per cent. provide in their by-laws for the distribution of profits on a patronage basis. This last figure is misleading, as will be pointed out below.

As for the limitation of the number of shares that each member may own, the limits run all the way from 1 to 100 shares. The commonest limit is 1; the average is 7. Information obtained from 150 creameries on this point appears in the following statement, where the creameries are grouped according to the maximum number of shares allowed to each member:

Maximum number of Shares that one person may own	Number of Creameries
1	50
2	11
3	6
4	20
5	13
6	2
7	2
8	3
10	21
12	1
15	7
20	7
25	2
50	2
100	1
Depends on number of cows owned	2
Total	150

Although only one-fifth of the companies provide for the patronage dividend in their by-laws, this does not mean that the great majority depart from co-operative principles, because most of them operate on a no-profit basis and hence have no profits to divide under the formal patronage dividend basis. Usually a creamery pays its patrons monthly for the butter-fat contributed; from the total receipts from butter sold during the preceding month are subtracted the expenses of that month, together with a small amount for a sinking fund, and the remainder is distributed on a butter-fat basis. When farmers have to be paid for their butter-fat from day to day, before the creamery knows what it will receive for its butter, it is necessary to make a profit in order to be on the safe side, and then the patronage dividend is essential. Of course the method outlined above is exactly equivalent to the patronage dividend, and is even better.

In many of the older creameries not even dividends on capital stock are paid. The owners of the stock feel that they have been well repaid for their investments in years gone by, and they are satisfied to have all proceeds distributed on a butter-fat basis. In fact some of the oldest creameries in the state, and the movement began about 1890, have never been incorpor-

ated. The original founders formed voluntary associations and raised money to build a creamery by signing a joint note, the note to be paid off by setting aside a certain amount from the receipts of each pound of butter sold. After the notes were paid off, no one had tangible title to the property, and this condition exists even to-day. Under such circumstances, the farmers feel that the creamery belongs to the community as a whole; in one instance, a farmer said that they considered that the creamery belongs to the last man that shall leave the community.

Not all of the creameries operate on the no-profit basis described above, but practically 80 per cent. of them do, with payments made to patrons once a month. Some creameries pay twice a month, a few weekly, and a few daily. These facts are significant, because in most lines of marketing farmers want to receive cash for their products when they bring them to market. The usual reason for paying patrons weekly or daily, as a few creameries do, is to meet the competition of centralizers which pay cash for the cream shipped to them. For a co-operative creamery to have to pay cash to its patrons in order to keep them from shipping to centralizers, is an indication that the farmers are not over-loyal to their organization.

(ii) *Competition with "Centralizers."*

One of the principal problems that the co-operative creameries have to meet is the competition of the centralizers. As already explained, centralizers are large butter factories, usually located in the larger towns, and obtaining their cream not from the adjacent territory by wagon, but from considerable distances by rail. The cream supply of the centralizers comes largely from communities where dairying has not been sufficiently developed to enable farmers to support a local creamery, and from this standpoint the centralizers furnish an important market for communities that are sparsely settled, and they have given an impetus to dairying in districts that have previously depended on the uncertainties and deteriorating soil conditions connected with the one-crop system of agriculture.

But the centralizers offer effective competition even in well developed dairying communities where the farmers have their own co-operative creameries. Cream shipped to centralizers is almost always sour by the time it reaches them, and some of it is dirty and well advanced beyond the merely sour stage. It is surprising how good a quality of butter the centralizers make considering the quality of their raw material, and the price that they receive in the markets is relatively little below that received by the local creameries for their superior product. Since they manufacture on a large scale, their unit costs are lower than those of the smaller local creameries, and they also market their wares with greater efficiency. As a consequence, they can afford to pay prices for butter-fat that compare very favorably with those paid by local creameries, and farmers living at some distance from their local creameries are tempted to ship cream to centralizers once a week rather than haul to the creamery say three times a week.

In order to meet this competition, local butter-makers often take cream of inferior quality in order to hold their patrons, and consequently the quality of their own output suffers, and they receive poorer prices. A large local creamery which sticks to the quality basis, does not need to fear the competition of centralizers, but the smaller creameries in the newer communities always have them to contend with. As a result, a feeling of bitterness has grown up in the state among the local dairymen against the centralizers, a feeling which has been the cause of certain state laws which have attempted to curb the activity of centralizers. The centralizers have developed only within the past ten years, but their existence has made it necessary for the small co-operative societies to fight to maintain quality and to hold their patrons.

The co-operative creamery movement has been greatly aided in Minnesota by the State College of Agriculture and by the State Dairy and Food Department. During the nineties, Professor T. L. Haecker was a great power in getting the movement under way. The Dairy School of the College of Agriculture has trained many of the butter-makers who are now employed in the co-operative creameries. The State Dairy and Food Department has general supervision of the creameries of the state, sends out inspectors who look after sanitary conditions, procures annual reports from all creameries, publishes an annual report, and manages butter-scoring contests among the butter-makers. On the whole, the butter made by the co-operative creameries is of high quality, and Minnesota almost regularly wins in national competitions among the butter-makers of the several states.

Most of the butter made in the co-operative creameries of Minnesota is marketed in eastern cities, notably New York and Philadelphia. The large cities of Minnesota — Minneapolis, St. Paul and Duluth — use principally the product of the centralizers. Consumers in those cities do not care to pay the price to keep the butter of the best Minnesota creameries from going to more discriminating markets 1,500 miles away.

(iii) *Co-operative Marketing.*

It has always been the practice for each creamery to market its butter separately rather than co-operatively. Solicitors from large New York and Philadelphia houses go about from creamery to creamery and obtain their shipments. Creameries in Minnesota are paid principally on the basis of New York quotations. Within the last few years, however, there has been an attempt to develop common action among the co-operative societies of Minnesota in marketing. The Minnesota Co-operative Dairies Association is a co-operative corporation the stock of which is owned by co-operative creamery companies, and which has acted as the agent of several creameries in selling their product. Until recently the organization has never had an assembling or distributing house of its own; the manager has merely designated certain wholesale houses in the eastern cities to which the creameries should ship direct, the associaton obtaining its revenue from the whole-

sale houses in the form of a fixed amount per tub on all butter shipped by association members. The manager has attended to matters of railroad rates and facilities, the collection of damage claims, etc., and has exercised general supervision and given helpful advice. Although there is more or less difference of opinion as to the actual benefits derived from this association, it at least has the germs of a more efficient marketing organization. The association has always been hampered by lack of funds, and has not been able to attempt to do all that it set out to do, but during the present year, 1915, it has established its own distributing office in New York City. It is too early to measure the success of this venture. Although this form of co-operative marketing looks attractive, and doubtless will benefit the shippers to a certain extent, it is not likely that the results will be as important as one might think at first sight, because the marketing machinery for butter under individual initiative has reached a high state of efficiency in eastern cities, and the economies resulting from co-operation are apt to be disappointing.

§ 3. Farmers' elevators.

Minnesota is one of the principal grain-producing states in the United States. Wheat, oats, barley, rye, corn, and flax-seed are shipped in large quantities. Minneapolis and Duluth are two great primary grain markets located within the state, and most of the grain marketed finds its way to these two cities. Grain destined for export usually finds its way to Duluth, at the western end of the Great Lakes. Minneapolis, however, is the more important market and is the leading primary market for wheat and barley in the United States. A large proportion of the wheat is ground into flour in Minneapolis which has the largest milling capacity of any city in the world. Much of the other grain is redistributed from Minneapolis to other markets in the eastern part of the United States.

At country points the grain brought in by the farmers is collected in elevators. There are often from three to five elevators at a single shipping point, ranging in capacity from 20,000 to 40,000 bushels each. These elevators buy the grain outright from farmers as they haul it in by the wagon-load, and ship it out in carload lots to commission men in the primary markets, where it either goes direct to millers, is transhipped to other markets, or is put into huge terminal elevators where it awaits the time when it is needed for consumption.

Country elevators have been in existence practically ever since there have been railroads to carry the grain to market. At first, these elevators were built and owned by private companies called "line companies" because each company operated a whole line of elevators at the various stations on a single railroad. The headquarters of these companies were located in the primary markets. They furnished an important and indispensable market for the grain raised by the farmers, and have done much to make

possible the agricultural development of Minnesota and other grain-growing states.

But there were disadvantages connected with the operations of the line houses. Sometimes they cheated the farmers by paying less than their grain was worth; sometimes they accomplished this end by underweighing the farmers' grain; sometimes by undergrading it; and sometimes by making undue substractions for dirt and foul seeds included with the grain. Although these practices were probably not so common as was generally believed, the farmers were dissatisfied, and sought to remedy the difficulty, first by bringing about state legislation to control the grain trade, and later by undertaking to own and operate the local grain elevators themselves.

(i) *History of the Farmers' Elevator Movement.*

The movement on the part of farmers in Minnesota to own and operate their own elevators began about 1890; a few attempts were made before that date, but most of them failed. In fact a large proportion of the attemps during the nineties also failed. The farmers were beset by many obstacles. The line elevators were naturally opposed to the movement, and they had the railroads on their side. It was difficult for the farmers to get trackage sites on which to build their elevators; and when they did procure sites and build their elevators, every possible device of destructive competition was brought into play by the line-elevator companies to drive them out of business before they could get fairly started. The usual method employed was for the line elevator to pay such high prices for grain that no one would sell to the farmers' house. The farmers would cut their own throats by being disloyal to their own companies for the sake of a temporarily higher price. The line companies of course recouped their losses by paying less at other points, and by reducing prices after they had driven the farmers' houses out of business.

Add to these difficulties the fact that the farmers were inexperienced in business affairs, and that their elevators were managed very poorly, and it is only natural that a great many failed. But in spite of early discouragement the farmers persevered, and to-day we have a goodly number of farmers' elevators which are meeting with a large degree of success. Since 1900, and especially since 1905, farmers' elevators have been gaining rapidly on the line companies: the former have not only been gaining in number, but the latter have been rapidly decreasing. The decrease in the number of line elevators has been due partly to the fact that there is less grain marketed in Minnesota than formerly, partly in turn to the development of mixed farming; but this fact only lends greater significance to the fact that farmers' elevators have been actually increasing in number.

The Minnesota Railroad and Warehouse Commission has for years collected statistics of elevators in Minnesota. In 1906 the report of this commission showed that were there only 151 farmers' houses as compared with 1,199 line houses; in 1912, the number of farmers' houses had increased

to 300, and the number of line houses had decreased to 777. The figure for farmers' houses is a little too high, because there are a number of independent elevators which are called "farmers' elevators" by their owners, but which are not really entitled to that name. This fact has been taken into consideration in the first table above, where it is shown that there were practically 270 farmers' elevators in Minnesota on January 1, 1914. On January 1, 1915 there were about 278. These represent elevators in which farmers own at least half of the stock, and with few exceptions farmers own practically all the stock.

The 270 farmers' elevators in existence on January 1, 1914, had an aggregate membership of about 34,500 farmers, an average of 128 per company. One farmer out of every five in the state belongs to a farmers' elevator company. One company has 600 members, one 500, two 400, and four between 300 and 400. The aggregate volume of business may be estimated as approximately $24,000,000 in 1912-13, and as approximately $30,000,000 in 1913-14. Of the $24,000,000 of the earlier year, $22,000,000 represents the value of grain marketed, and $2,000,000 the value of supplies, etc., purchased for members. The grain marketed through the farmers' elevators constitutes about one-third of all grain marketed throughout the state. At points where a farmers' elevator has competition from three or four line elevators, it is common for the farmers' house to handle at least half the grain marketed at such a point.

(ii) *Features of Organization.*

Because of frequent criticisms to the effect that many of the farmers' elevators of Minnesota are not strictly co-operative in form, an attempt has been made to determine the facts with regard to the use of the one-man-one-vote principle, the limitation of the number of shares that one member may own, and the use of the patronage dividend. The facts with regard to these so-called essentials in 1912-1913 were as follows:

Of 239 companies reporting, all but 13, or 94.5 per cent. of the total, have the one-man-one-vote principle. As for the limitation of number of shares, 39 companies, or 16 $^2/_3$ per cent. of the number reporting, set no limit on the number of shares that one person may own. The other five-sixths of the companies set limits ranging from 3 shares to 50 shares. One has a limit of 100 shares. Sixty-nine of the companies, or 30 per cent. of those reporting, set the limit at 10 shares. Most of the others set limits of 4, 5 or 8 shares. About one-third of the companies report that they limit the dividends on capital stock and distribute the balance on the basis of patronage. The size of the stock dividend is of interest in this connection. Out of 52 companies, only 1 limits it to 5 per cent., only 9 to 6 per cent., 3 to 7 per cent., 13 to 8 per cent., and 16 — or the largest number of all — pay a dividend of 10 per cent. before they distribute anything on a patronage basis. In other words the patronage dividend has not been widely adopted, and in the majority of cases where it has been adopted more than the current rate of interest

is paid as a dividend on stock. Most of the companies that have the patronage dividend pay it only to members although a few include non-members.

There are many who will doubtless conclude from these figures that the farmers' elevators of Minnesota are not co-operative in the true sense of the word, and hence are not worthy of consideration. When elevators are owned and operated by farmers, however, and when they limit the capital stock that each member may own, and also have the one-man-one-vote principle, they have gone far in the direction of true co-operation. In so far as they do not make large profits, and pay only small dividends on stock, they are practically co-operative even if they do not have the patronage dividend. Many, however, pay dividends of from 12 to 25 per cent. and in this respect do not live up to co-operative principles.

Out of 139 companies reporting for 1912-13, 59 (or 42 per cent.) paid no dividends at all on stock; there were only 18 companies out of these 139 that paid over 10 per cent. One paid 125 per cent., but that company has since adopted the patronage dividend. There were 2 that paid 25 per cent., and 6 that paid 30 per cent. Twenty-eight paid 10 per cent. dividends.

During 1913-14 the elevators enjoyed a slightly higher degree of prosperity. The dividends paid by 161 companies were as follows:

	No. of companies	Per cent. of total
No dividends	64	39.8
10 % or less	66	41.0
Over 10 % but not over 20 %	18	11.1
Over 20 % but not over 30 %	8	5.0
Over 30 %	5	3.1
	161	100.0

Of the 64 companies that paid no dividends, 20 actually lost money. The prevalence of dividends of over 10 per cent. indicates the great need of the use of the patronage dividend. Farmers make a great mistake by judging the success of their elevator companies by the size of the dividends they receive rather than by the prices received for their grain from day to day. An elevator may run on a no-profit basis and still be a great boon to the patrons.

(iii) *The Penalty Clause.*

In some parts of the United States it has been found necessary for farmers' organizations to impose some penalty on members who are so disloyal

as to sell their grain or other products to outside buyers who temporarily pay high prices in order to drive the farmers' organization out of business. Many a farmers' organization has been wrecked by this practice, and not a few have been saved by a penalty clause, which fines members a certain amount on all commodities not marketed through the association. In Minnesota, however, the penalty clause has not been used to any extent by the farmers' elevators. Out of 166 companies reporting on this point, there are 32 or 19.3 per cent. that have a penalty clause in their by-laws, but there are only two that have actually used it. Ninety-five out of 111 elevator officials consider it inadvisable to have the penalty clause, whereas the other 16 declare in favor of it. Of the 32 that provide for the penalty clause in their by-laws, 24 place the penalty at 1 cent per bushel, 4 at ½ cent, 3 at 2 cents, and 1 at 2 per cent. of the value of goods sold. The fact that only two elevators have actually enforced the penalty, however, and that the large majority of elevator officials are opposed to its use, indicate that the penalty clause is of minor importance in Minnesota. Doubtless it would have been a great help in the early days of the movement, but the day has apparently passed when it is needed.

(iv) *Salaries of Managers and Cost of Handling Grain.*

The salaries of managers range all the way from $60 per month to $165 per month, although there are only 11 companies out of 168 that pay $125 or over. The average salary of all managers is about $90 per month. Farmers have frequently made the mistake of trying to save money by hiring inexperienced managers at low salaries, and this has been the direct cause of failure in many cases. Reports received for 1912-13 indicated that the salaries of managers in elevators that lost money averaged about $10 per month less than the salaries of managers who returned profits. It requires greater tact and ability to manage a farmers' elevator than a line elevator, because the manager of a line elevator has nothing to do with the selling end of the business. He merely reports to his head office the amount bought, and receives instructions as to when to ship out. Neither does he have to bother with hedging. The manager of a farmers' elevator, on the other hand, has to use his own judgment about when and where to ship, when to hedge, whether to sell " to arrive " or " on track, " and has to use unusual tact with the farmer members. Farmers are gradually getting educated to the fact that they can save money by paying high enough salaries to get experienced men.

Most elevator companies have to hire " helpers " to assist the managers during at least part of each year. In fact, out of 168 elevators reporting on this point, 142 had helpers at least part of the time during 1913-14. Such helpers are usually paid from $40 to $60 a month; a great many are hired for only two or three months during the fall; some are hired for six or eight months; few have helpers all the time. When a company handles coal and other supplies for farmers, such assistance is usually necessary.

Out of 167 companies for which information is available there are 131, or 78.2 per cent. that require their managers to give bonds. The amounts of the bonds of 128 companies are classified as follows :

Amount of Bond	No. of Elevators
$ 1,000	17
1,500	9
2,000	51
2,500	5
3,000	16
3,500	1
4,000	3
5,000	19
6,000	3
8,000	2
10,000	1
25,000	1
Total —	128

In 81 cases out of 114 the company pays for the manager's bond; in 31 cases the manager pays; and in 2 cases the company and the manager divide the expense.

Since there are certain fixed expenses that continue however much grain an elevator handles, it follows that the larger the quantity of grain handled, the smaller the cost per bushel. This cost per bushel has been figured for different groups of elevators according to the amount of grain handled during the year 1912-1913, with the following results. (1)

No. of bushels handled	Cost of handling per bushel (cents)
50,000 to 100,000	2.5
100,000 to 150,000	1.9
150,000 to 200,000	1.5
200,000 to 300,000	1.3
300,000 to 400,000	1.1

(1) These figures were compiled from the reports of elevators that do not handle other commodities than grain.

It will be seen from these figures that an elevator which handles only between 30,000 and 100,000 bushels in the course of a season has an average expense of 2.5 cents per bushel, whereas elevators which handle from 150,000 to 200,000 bushels have an average expense of 1.5 cents. When the grain shipments from a single station are divided up among four or five different elevators, as is frequently the case, the cost of doing business is high, and the elevators consequently have to pay low prices for grain to obtain sufficient margins to cover expenses and make profits. When the farmers concentrate their marketings through their own elevator, they reduce the cost of handling and therefore receive higher prices for their grain. Herein lies the principal economic benefit of farmers' elevators. Through greater efficiency due to concentration of shipment and reduction of unit costs, and through forcing line elevators to pay better prices, the farmers' elevators probably save the farmers of Minnesota $1,000,000 a year.

The margins on gross profits per bushel of grain taken out by farmers' elevators vary greatly for different kinds of grain. The following statement shows the actual average gross profits taken out for the different kinds of grain in 1912-13:

	Actual margin taken (cents per bushel)
Wheat	1.4
Oats	1.6
Rye	2.0
Barley	2.1
Corn	2.4
Flax-seed	3.6

From this it will be seen that farmers' elevators take the smallest profits on wheat and oats and the largest on flax-seed. Wheat and oats are handled in greatest quantity so that the elevators can afford to handle these grains on small margins. Holdings of wheat, oats, and corn can also be hedged, thus eliminating risk, and the majority of farmers' elevators take advantage of this important protective feature offered by the "futures" market, especially in the case of wheat. The margin taken on barley, the handling of which involves considerable risk, is really too small for safety; many elevators lose money in handling this grain. It is interesting to compare these margins with the cost of handling as shown above. On the whole, farmers' elevators pay farmers the very highest possible prices for their grain: line elevators cannot be run profitably on such narrow margins. These figures illustrate in the most conclusive fashion the economic saving made possible by farmers' elevators.

(v) *Accounting Methods, Financing and Equipment.*

About twenty per cent. of the elevator officials admit that their accounting systems are unsatisfactory, and judging by the nature of the reports sent in it is apparent that there are many others who are not so frank. One of the greatest needs of the farmers' elevator movement is better accounting methods. The Office of Markets and Rural Organization has made a study of this problem and has devised a system of accounts which is in successful use in a number of elevators, and which has been made public in Bulletin No. 236, United States Department of Agriculture, "A System of Accounts for Farmers' Co-operative Elevators," by J. R. Humphrey and W. H. Kerr. There is a large demand for this accounting system and there is now no excuse for a farmers' elevator to be without an adequate system. It is true that most managers need instruction concerning the use of this set of accounts but steps are being taken both by the state and by the federal Government to give such aid as managers require.

Another interesting question is the method of financing farmers' elevators. The elevator has three sources from which it may borrow money: first, the grain commission men at the terminal market, second, local bankkers, third, individual farmers. Information on this point was procured from 158 companies in 1914. Fifty-one per cent. are financed in whole or in part by commission men; 72 per cent. borrow more or less from local banks; and only 13 per cent. borrow from farmers. About one-fourth of all the elevators report that they are financed exclusively by commission houses. The average rate of interest charged by commission houses was 6.7 per cent., by local banks 7.4 per cent., and by farmers 6.3 per cent.

Although farmers charge lowest rates, the commission firms charge much lower rates than the local banks. Local banks are often unable to extend sufficient credit both because of lack of funds and because of the law limiting the proportion of capital or surplus that may be loaned to one person or company. The commission firms are of course glad to lend money in order to get the elevators' consignments, and a written agreement is required stipulating that the elevator company ship all or a certain proportion of its grain to the commission house that makes the loan. The commission firms in turn borrow from Minneapolis, and Duluth banks, and do not aim at making any profit on this transaction.

Although there is some disadvantage in an elevator tying itself up with a single commission firm, it must be remembered that in the past there has been practically no other source from which the elevators could borrow money and that the commission men have performed a valuable service especially in the newly settled communities. Reliance on local sources is increasing rapidly in Minnesota, while in North and South Dakota the elevators are still mainly dependent on the commission firms.

Most of the elevators owned by farmers' companies have capacities running from 20,000 bushels to 40,000 bushels; there are more that have less than 20,000 than that have more than 40,000. The most frequent

capacity is 30,000 bushels; the average is about 27,000. The number of bins in most of the houses runs from 9 to 20; by far the most have from 10 to 14. In an elevator with 10 or 12 bins it is often necessary to mix different grades of grain more than is advisable. Many of the companies reserve a larger number of bins for wheat than for other grains, so that the different grades may be kept distinct from each other. Usually but one bin is used for rye, and only one or two for barley.

Out of 168 companies reporting, practically all have wagon scales for weighing grain brought in by farmers, but only 20 have self-registering beams which eliminate the personal element in reading weights. Only 3 have track scales for weighing out for shipment, but 75 have automatic scales for this purpose which record the quantities loaded into freight cars. There are also 15 that have corn-shellers, 96 that have cleaning devices, and 19 that have feed-grinders. Those which undertake cleaning and feed grinding often show handsome returns from these activities.

(vi) *Purchase of Supplies for Farmers.*

The fact that farmers have permanent organizations in the form of elevator companies, with warehouses and permanent managers enables them to use these companies as agencies for the co-operative purchase of supplies, and this is done to a considerable extent by the farmer's elevators of Minnesota. It has been shown that in the year 1912-13 they bought about $2,000,000 worth of coal, flour, feed, etc. Of the elevators that reported for that year, there were 63 per cent. that handled coal, 41 per cent. feed, 40 per cent. flour, 35 per cent. binding-twine, 18 per cent. seeds and 16 per cent. salt. Among other commodities handled are cement, tile, farm machinery, lumber and fence posts, oil, and wire fencing. All but 41 companies out of 239 reported the handling of some commodity other than grain. Coal is the most important commodity handled in this way. In 1912-13, about 160 farmers' elevators bought nearly 150,000 tons of coal, worth nearly $1,000,000, or about 900 tons per elevator.

(*To be continued*).

FRANCE.

MECHANICAL POWER USERS' ASSOCIATIONS IN AGRICULTURE.

In order in some measure in diminish the difficulties arising from the wastage of draught animals, the authorities have conceived the idea of utilising after the war those motor cars known as *poids lourds*, making such alterations in them as may be needed to adapt them to various agricultural uses as soon as the War Office hands them over to the Department of Agriculture at the end of the war.

At the Ministry of Agriculture a Commission has been appointed for this purpose. At its first meeting it was divided into two sections each with its own distinct functions.

The first — the technical section — will examine the motors and adapt the engines to the use to which each is to be put. It must decide what alterations must be made in the various types of heavy motors, and the best method of effecting such alterations.

The second section — the economic section — will be occupied with placing out the motors in rural centres, with laying down the conditions to be fulfilled by agricultural associations in order to be authorised to receive them, with the rules for the organisation of such associations and with the conditions to be satisfied by them. It must determine in what way the employment of mechanical motor power may be made most profitable to agriculture. The following account is based upon the work of this section, as described in the review *La main d'œuvre agricole* for May, 1915.

§ 1. The purposes to be served.

The purposes which the motors are capable of serving may be classified in order of importance as follows:

(*a*) The creation of a new agricultural technique, based upon the substitution of mechanical labour for the ordinary methods;

(*b*) the installation in rural centres of a stationary motor for the use of the community;

(*c*) the organisation, in undeveloped districts, of rapid means of transport for agricultural produce;

(*d*) the turning to account of uncultivated ground, or the improvement by mechanical means of unproductive land;

(*e*) the reviving or perfecting of small rural industries.

The last three points mentioned are not of such general interest as the first two: less attention will therefore be given to them than to the others.

Whatever use it is proposed to make of the motors it would seem indispensable to give the preference to applications coming from districts which have suffered from the war. It is, moreover, in certain of these districts that machinery will have the best chance of success.

Next, will come requests from Departments where landed estates are relatively not greatly subdivided, and where climate, soil and crops are adapted to the use of machinery.

In the third place come the districts in which the holdings are of medium size, and agricultural machines may with advantage be used by private individuals.

In those Departments in which small farms prevail, and in districts where local customs preclude hopes of an advantageous use of motors in agriculture the question of their eventual employment will be considered.

§ 2. Guiding rules upon which motors are to be assigned.

In the distribution of the motors an endeavour will be made to adhere to the following principles:

To send motors only to those districts where the experiment will have the best chance of success, so that the results may be sufficiently rapid and instructive to encourage agriculturists to persevere of themselves in the intelligent use of the motors.

Not to attempt to serve private interests, however important they may seem, but to endeavour to promote the general interests of a homogeneous and important group of agriculturists.

To establish among the rural inhabitants a closely related group of experimentists who will learn from the management of a motor already used what improvements might be made, and suggest them to the makers.

To direct the agriculture of any district according to new and clearly defined systems.

To obtain these results it seems indispensable:

(*a*) To classify the motors according to their intended uses;

(*b*) to put them in order so that they may at once give the best possible results;

(*c*) to send them only to districts previously studied where it seems certain that the desired result will be attained;

(*d*) to arrange the requests in order, giving priority to those of most agricultural importance, taking into consideration every circumstance

which might modify the value of the services which the motor is capable of furnishing.

It will readily be perceived that the only way to make the work useful is to examine separately every case, classifying each according to certain rules hereafter to be explained

§ 3. Terms upon which motors are to be assigned.

It was proposed at first to distribute them as gifts pure and simple. But such generosity on the part of the state would necessitate the intervention of Parliament and a very complex procedure. Gifts pure and simple would inevitably entail injustice by conferring to some extent a privilege on agriculture of which commerce and manufacturing industry would complain. Between the associations receiving their motors gratuitously, and those acquiring them at a heavy cost, jealousies would arise. Co-operative societies especially would consider this an attack on their rights and a want of recognition of the sacrifices they had made.

Furthermore, though every part of France suffers in an almost equal degree from the scarcity of manual labour, all have not equal need of mechanical power. If, for instance, motors be given to districts where large scale cultivation prevails, what compensation will be demanded by those employing water power?

The motors at present handed over to the Ministry of Agriculture are not sufficiently varied in type to meet all needs. Small power motors can be utilised only in certain districts, and to satisfy certain applications the difficulties of choice would always be very great.

Finally it must not be forgotten that in the case of gifts, even conditional, applicants would be innumerable.

Should the idea of gift be abandoned, recourse must be had to sale or hire.

Sale by the state of serviceable motors would be a somewhat difficult measure, because in the first place French legislation concerning public auctions does not permit of the right of acquisition being limited to agricultural societies; secondly, because the discontent of manufacturers desirous of obtaining motors at a cheap rate would certainly be turned into opposition; lastly, because there would be a very real difficulty in raising the capital necessary for the purchase, not only of the motors but of their indispensable accessories. Moreover, in the case of sale outright, the state would be to some extent indifferent as to contingent grants intended to accompany the motors. Having parted with the motors and obtained the price it would not be possible to influence or direct the purchasers, and the object of the Government would not be attained. To these objections others might be added to show the disadvantages of sale.

Hiring out has also numerous disadvantages, but it has decided advantages over gift or sale. We shall consider first, assuming that the motors

are to be hired, in what state they are to be handed over to successful applicants. On being handed over to the Ministry of Agriculture they will be put into good working order, but this alone will not suffice, for they will require mechanical adjustments necessary to adapt them to agricultural uses. They must also be provided with sufficient spare parts for use in case of need, also with tools and implements of every kind, — in a word, with all the accessories without which the motor would be useless.

If agriculturists are to be given a taste for machinery, it is essential that the motors should be delivered to them in perfect working order. It might occasionally be well to send a specialist capable of instructing the farmers in their management and in the use of the tools which accompany them. Thus we might look forward to the foundation of a school of practical rural mechanics which would furnish instruction and equip men with the mechanical knowledge necessary for handling the motors.

The total of the first expenses connected with a motor and its various appliances for one association will form the cost of installation of the motor. Advances to meet this cost will be made by Government.

In determining the amount to be charged for hire, it would be necessary to consider whether to the initial expenses incurred it is advisable to add the value of the motor itself as determined by an expert valuer.

With or without this valuation the sum to be paid for hire may be calculated when the motor is actually put into use. The rate charged should be sufficiently high to give an appreciable yield to the State. This yield would be paid into the Treasury. However small it may be, a payment for hire can only be made if the motor is in good working order. When through wear and tear or from any other cause it must be sold by the Domanial Administration, the charge for hire will cease.

Each case must be judged by itself, but as Government motors will be used for experimental purposes and there will be errors in their management at first, the greater number will not last more than four or five years. Their accessories will, doubtless, last much longer, having been new when put into use.

A rapid decrease in the receipts from the hire of the machine may be foreseen, and is calculated at two-thirds of the initial receipts in the first 5 years and the remaining third in the subsequent five years. It is hoped that, at the expiration of this period, the results will prove that the use of machinery worked by other than animal power will definitely enter into agricultural economy. It is essential in rural neighbourhoods to direct towards the country districts a supply of motors which will serve to check the crisis in agricultural labour through the progressively increasing employment of mechanical power.

§ 4. Hiring associations.

One of the most difficult questions is to decide who are to have the benefit of these motors. Evidently they cannot be private persons no mat-

ter what may be the extent of their holdings or the advantages they might offer with regard to the diffusion of the idea. Government would not in any circumstances entertain a proposal to furnish motors to private persons. We must then choose between making use of existing associations or forming new ones. *A priori* it is better to utilise those already existing, for the development in country districts of associations in a form hitherto unknown would at the present time offer real difficulties.

The syndical association, constituted according to the law of 1865 would suit perfectly if the question were exclusively one of the improvement of uncultivated land belonging either to private persons or to groups. The same form would serve equally well for the cultivation of extensive areas; and would enable the Government, through the medium of associations, either sanctioned or obligatorily established, to make the general good prevail over private interest. But we know the resistance of agriculturists to anything that has the appearance of compulsion, and to insist exclusively on the form of syndical association would destroy the whole project. It might, however, be retained in certain special cases, and encouraged in the same way as other forms of association when it is the result of the free initiative of agriculturists. Besides it could only with difficulty be adapted to all the methods of utilising motors which must henceforth be considered. Co-operation requires on the part of agriculturists a preliminary financial effort which it will not always be easy to secure, considering the circumstances under which such efforts must be made. Agriculturists generally would rather spend their money in the purchase of new than of second-hand machinery.

The necessity of gathering a certain amount of capital together, of making it productive, and of maintaining it, would be a serious difficulty in the case of small proprietors desirous of joining in the collective enterprise — a difficulty sufficient to destroy the purely democratic character of the enterprise; and we should bear in mind that the slightest check would have considerable effect in impeding the entire project.

For this reason, the economic sub-commission, leaving to co-operation, assisted by important advantages granted by the State, the possibility of sharing in the distribution of motors, considers that the development of cultivation by machinery should not be made dependent upon the success or non-success of associations which aim at making profits, and which, in the form of funds owned by them or advanced to them, dispose of means which at present at least could not be further increased.

Communes might in certain cases be comprised among the associations entitled to receive motors. Not only should such cases be clearly defined, but their aim should be the public benefit. Local agriculture under the care of the commune should not reap more advantage than the other branches of industry. Now, the importance of the projected measure lies in the possibility of leading agriculturists to new methods calculated to increase production, so that this indispensable localisation of effort would annul *ipso facto* many of the possible modes of utilising motors in rural

communes. One other form remains, that of the *syndicat*, which the sub-commission has pronounced to be preferable to all others.

That the *syndicats* may readily embark upon any enterprise calculated to diffuse the employment of mechanical power throughout the country districts, a common designation should be everywhere adopted, and the sub-commission has approved that of *Syndicats de méchanique agricole.* (Agricultural Power Users' Associations). It is necessary that the aims of the associations should be clearly defined. In order not to limit their expansion (while remaining within the limits of the law of 1884 for the protection of agricultural interests) it will be necessary to trace exact lines for their constitution and working. Their principal objects should be:

(*a*) To make up the shortage of manual labour in country districts by the progressively increasing use of mechanical power in place of animal power in agricultural work, in cultivating the land, in harvesting, and in the preparation of the produce for sale or consumption. One or other of these objects, or both together, might be undertaken by the same *syndicat.*

(*b*) To reduce the cost price of the products of the soil by improving the methods of preparation or of sale (selection of seeds, preparation of cattle-feeds, flour and other mills, means of transport, establishment or improvement of rural industries, etc.).

(*c*) To increase local production by instructing agriculturists in the best methods of improving the soil (clearing, labour in common, reclaiming of waste land, etc.).

§ 5. Constitution and working of associations.

The present legislation with regard to *syndicats* and the experience gained in its working supply the elements necessary for the formation of the new associations.

Established under the law of 1884, they may be communal, inter-communal or cantonal, according to the purpose for which they are established.

Certain special rules applying to individual associations will be drawn up to guide agriculturists in their future course. Thus, power associations, to obtain recognition by Government, must be in possession of a piece of ground of sufficient size to render the use of modern machinery economical. The minimum area will have to be decided when the question of framing model rules comes up for discussion. The area, moreover, should be in parcels of a minimum area of two hectares belonging either to individuals or to groups of proprietors who have thrown their small holdings into a single parcel. The number of days the motor should work, and the methods of settling accounts, would also be determined beforehand. The same would be the case with regard to other associations, according to the object proposed, the local situation, the force of the motor and the economic conditions. The value of all these factors differing in importance must be

precisely determined and will be made the object of a special study for each kind of association.

Power associations will have all the privileges granted by law. All their expenses will be covered by contributions the amount of which will be fixed beforehand in proportion to the service rendered to each member. The ordinary receipts will therefore comprise subscriptions, grants, gifts and legacies, sums paid for work done, the interest on funds in hand etc., as usually enumerated in every case of the kind.

Neither from a legal nor from an agricultural point of view will their constitution meet with any difficulties other than those encountered by associations in general, and which are easily surmounted.

Their stability, more than that of similar associations, will rest on the Managing Director, who should be a man already familiar with the management and upkeep of motors and other machines, with the cost of labour, and with the principles and practice of estimating depreciation in agriculture.

It is indeed indispensable that in fixing a uniform charge to members for services rendered, a sum should appear for wear and tear of material, for hire, at least during the first years, for replacing worn-out pieces, etc. A special examination of the subject, on lines previously laid down, should be made in every case.

The association being constituted takes over the machine and its accessories as arranged. How will it supply its own requirements?

The general opinion is that the greatest liberty should be left to the associations in drawing up their internal regulations, on condition:

(*a*) That they confine themselves strictly within the limits of the law, and do not exceed their powers either in working for profit or in placing the enrolment of members under too narrow restrictions;

(*b*) that the subscription required from their members should be according to services individually received, and low enough to make the association accessible to all;

(*c*) that the minimum price of work done by machines held in common should be fixed so as to cover expenses and permit of the building up of a reserve fund, the amount of which must never exceed a certain sum calculated according to the extent of the undertaking and the costs of upkeep of the machines;

(*d*) that the objects of the association should be essentially agricultural, and should be such as not to admit persons other than agriculturists to join the association.

§ 6. State aid.

The associations described above could not exist without Government assistance. It is therefore necessary to provide for the formation of a fund devoted to making grants, to appear in the general budget of the Ministry of Agriculture, the amount to be afterwards determined.

The distribution among the associations would be made in the following manner.

Each association would be entitled to two distinct sums as grants-in-aid. The first, called foundation grant (*prime de base*), would be fixed according to the amount of force estimated to be required by the total number of members. The sum to be paid would be calculated according to the declarations made by them and to the probable amount of work required by each.

This arrangement seems preferable to every other, for it is the only one by which the scientific importance of an undertaking can be judged, and which takes into account all the factors. Neither the number of members, nor tonnage, nor area, nor any other criterion seems capable of furnishing equal precision of appreciation.

A table should be drawn up to facilitate the fixing of the minimum annual production of force which would give the right to claim the foundation premium. The verification of this would be easily made according to the figures given in by the association in support of its statements.

This first sum, calculated by the above method or by any other that may seem convenient, will form the regular fixed grant which the association will enjoy so long as the motors in question are in use.

Another sum, the *special grant*, will be given to the syndicate according to the results obtained. It may be based on various considerations, *e.g.* the number of alterations effected with a view to the rounding-off of holdings, the number of new members, the increase in production, or the extension of the transport service.

This second grant would be a proof that the state follows the progress of the association, and encourages it to persevere in the course which seems best.

The subscription charged instead of being fixed at so much per head, which would not be equitable since the service rendered varies with the nature of the work to be done, might be fixed on a basis equal for all, the day's work of the motor, for example. Grants, gifts, departmental allowance if there be any, would form the reserve fund of the association, the regular increase of which would permit the replacing of worn-out instruments without burdening too heavily with general expenses the liabilities incurred by every member who makes use of the association's motor. This reserve fund would also be for each association an excellent means of obtaining credit.

The financial effort of the State in aid of power users' associations would contribute to the creation of an industrial impulse towards automobile construction; it would also encourage mechanical construction properly so-called, and, within a period of ten years for instance, repairs, new constructions and various supplies would procure business that might be valued (at only 10 per cent. of the initial capital, the average rate estimated in industrial calculations of the cost for the upkeep of motors) at about 50 million francs. To this must be added the sinking funds created by

existing societies, which allow of the gradual replacing of worn-out implements.

From an agricultural point of view the results would be immense, and their value cannot easily be estimated. By inciting the peasant to adopt new methods, by making him familiar with new machinery and by rousing his natural curiosity it would bind him by new ties to his native soil. This social prospect is of such importance that in the eyes of the economic sub-commission it takes precedence of every other.

It is not necessary to be well versed in statistics to perceive that the smallest increase in production is expressed by thousands of millions in the value of the crops. On this point it is needless to insist.

To sum up, the proposed organisation according to the economic sub-commission will work as follows :

The department concerned will examine all applications both from the economic and from the technical point of view.

The applications will first be submitted to the economic sub-commission, which will verify the statements of the association, on the spot when necessary, employing for the purpose an agent specially appointed by the department. The object and the steps by which it is to be attained must be clearly stated, the resources of the country with regard to it, and in short, all the facts and circumstances relating to the scheme.

Next comes the examination by the technical sub-commission, which will choose the motor best adapted to the case, will ensure its being in good repair, and will point out to the association the purchases to be made to put it in working order.

The whole plan is then submitted to a full meeting of the Commission which will decide as to the payment of grants.

The motor must be put in good repair before delivery. A guarantee will be given that the indispensable accessories will be paid for.

The administrative authority will consider the results obtained by the association, and will allot to it the grants the amount of which will as far as possible correspond to the effort made.

The association itself will be composed of agriculturists on the basis of the law of 1884. It will define clearly the objects it proposes to pursue, and the means at its disposal. It will make its application which will be examined by the department and will bind itself to pay the hire of the motor for ten years.

A beginning once made, the members will form a reserve fund destined to replace worn-out material.

The books of the society will be placed at the disposal of the agents of the state that they may verify the results obtained.

When the first motor, being worn out, reverts to the state, since it is not given to the association, the hire or the interest of the sums advanced by Government for the first installation will cease, and the association will work on its own funds.

MISCELLANEOUS INFORMATION RELATING TO CO-OPERATION AND ASSOCIATION IN VARIOUS COUNTRIES.

DENMARK.

CO-OPERATIVE DISTRIBUTIVE SOCIETIES IN DENMARK IN 1914.

According to an enquiry instituted by the Bureau of Statistics, the results of which have been communicated to us by our Copenhagen correspondent, there existed in all in Denmark, in the autumn of 1914, 1,562 co-operative distributive societies, including 36 branches comparable from the point of view of their balance sheets to independent co-operative societies, and 22 dependent branches. These 1,562 co-operative societies may be classified as follows according to the date of their foundation: —

Before 1870	21	1890-94	198
1870-74	58	1895-99	241
1875-79	45	1900-04	279
1880-84	57	1905-09	256
1885-89	222	1910-14	185

The oldest Danish co-operative distributive society dates from 1866, and of the co-operative societies founded in the four following years, 21 still exist. In the following 15 years about 10 co-operative societies were founded annually ; after this date, the proportion increases considerably. In the period from 1885-89, 45 new co-operative societies were founded yearly ; in the 5 succeeding years 40 were founded annually; and finally, during the five last years of the past century about 48 annually. In the period from 1900-1904 the movement attained its maximum with an average of 56 new co-operatives annually, and 51 annually in the period from 1905 to 1909.

The figures only show how many of the co-operative societies founded during the different periods are still doing business to-day, but we have not at our disposal any reliable data as to the number of co-operative societies that have so far been dissolved. It is therefore possible that the largest number of co-operative societies was actually founded between 1890 and

1899 and that if, to the 439 co-operative societies founded during this period, were added all those that were dissolved, the total would exceed the number given for the period from 1900 - 1909, namely 535.

In 1910 there still existed 466 of the co-operative societies founded between 1890 and 1899, that is to say 27 more than at the present time.

The distribution of the co-operative distributive societies in the towns and the country during the different periods is shown in the following table, which also refers only to societies still in existence.

	In the Capital	In Provincial Towns	In Rural Districts	Total
1870	—	3	18	21
1880	—	5	119	124
1890	—	8	395	403
1900	—	15	827	842
1910	9	52	1,316	1,377
1914	17	75	1,470	1,562

This table shows that the towns, and especially the capital, were very late in taking part in the co-operative distributive movement.

The fact that the co-operative distributive societies of Denmark, contrary to what occurs in other countries, are chiefly to be found in the country, is not entirely due to special conditions, such as the independence of the peasant class and the advanced development of the whole co-operative movement affecting the other working classes, but is also attributable to the circumstance that within a radius of 7.5 kilometres round the town, it is forbidden to establish any commercial undertaking. The situation of the co-operative distributive societies existing *in the country* is shown by the following table.

Distance from nearest town	Number of Co-operative Societies	
	1910 (1)	1914
Up to 7.5 km	387	390
from 7.5 to 11.3 km.	341	372
11.3 km. and over	592	708
Total	1,320	1,470

As may be seen, the increase is chiefly in the co-operative societies lying outside the proscribed zone (which is called *Laebaelte*), so the latter is gradually relatively losing its importance. The fact must also be taken into account that many towns have suppressed the regulation establishing the *Laebaelte*.

(1) Exclusively branch co-operative societies.

Of the 1,562 co-operative societies, 577 are provided with a licence giving them the right to deal with non-members. These societies thus represent quite a third of the whole ; but in the towns they number two-thirds, or 59 out of 92. In the rural districts of Jutland, this proportion is nearly a half (378 out of 824) and in the Islands, it is scarcely more than one-fifth of the total (140 out of 646), In 1910, as now, a good third of the co-operative societies enjoyed this privilege, but before that date the proportion was certainly less.

The total number of members reached 244,000 with an average of 156 per society. In Copenhagen, this average was 425, in the provincial towns, it was 433, and in the country 139. The co-operative societies that only deal with their own members have a somewhat larger number of members than those dealing also with the public ; the respective figures being 166 as against 138 (in the country 156 against 107), but these latter co-operative societies have also customers who are not members.

In order to appreciate the importance of the number of members given above (244,000), it should be borne in mind that the census of 1911 returned a total of 650,000 families ; the comparison of these two figures is, however, not quite correct, for one family may consist of several members (not including servants) or even figure in several societies.

The amount of business done by the 35 recently founded co-operative societies is not known.

That done by the 1,527 other co-operative societies amounted in the last business year to 103 million crowns, which is equivalent to an average of 67,000 crowns per society ; in 188 co-operative societies, the total business done was less than 25,000 crowns ; in 12 societies it exceeded 500,000 crowns. In these 12 co-operative societies the total business done was nearly three times as much as that transacted by the other societies, that is to say 9.0 as against 3.2 million crowns, which should also be taken in connection with the forage business (see below). The figures showing the relative position of town and the country are as follows : —

	Number of Societies	Total business done (incomings and outgoings) Thousands of crowns.	Average business done Crowns.
	—	—	—
Capital	17	1,912	112,000
Provincial towns .	68	12,466	183,000
Rural districts . .	1,442	88,509	61,000
Total . . .	1,527	102,887	67,000

The average business done by the societies (Sale Bureau) thus reached its maximum in the provincial towns ; in the rural districts, it was only a third of this amount. In 1910 the total business done amounted to 70 million crowns, or 50,000 crowns per society. From that date the increase has been very considerable.

Of these co-operative societies, 1,187 deal in cereals, forage, manures and seed and, of the total sum of purchases, which reaches the value of 91 million crowns, 25 million relate to business in these commodities. It is particularly in these commodities that some societies do a large business. The percentage of this business in the total of the purchases rises regularly with the increase in the business; in the case of the smallest societies (business less than 25,000 crowns) the percentage does not exceed 7; in the case of the largest (above 300,000 crowns) it is as much as 70.

Taken as a whole the trade in groceries is still greater, but there are no statistical data relating to this subject. It is only known that 963 societies have asked for the special licence necessary for the sale of spirits. In 1910 the number of these societies was relatively larger (867); and this relative decrease is the more interesting, inasmuch as after the coming into force of the new law dealing with commercial undertakings, a special licence has been necessary even for selling beer, although formerly this was only required in the case of brandy.

The total business done of 103 million crowns corresponds to a *net profit* of 6.4 million crowns, which is equal to an investment at 6.2 per cent. The rest of the difference between the business done and the amount of purchases has probably been expended on salary, rent, lighting, packing material, etc. In addition, account has been taken of various sources of error that exist in this connection; for instance, the value of goods on hand undergoes considerable change at the beginning and end of the year, especially in the case of forage. In 1810, the net profit was estimated at about 6.2 per cent.

In the case of societies which do not effect public sales, the net profit is much higher (7.0 per cent. as against 5.1 per cent.), but as there are no dividends to be paid to non-members, the difference in the amount would be much less if it were calculated on the sum that the members receive in the form of a bonus. The real reason for this difference cannot be deduced from the data obtainable; it is possible that societies carrying on trade incur larger expenses; it should also be mentioned that competition may oblige them to lower their prices. In the case of societies that do not sell to the public the absolute level of prices has not the same importance for the members as in other societies, for the members are repaid in the form of a bonus the additional price charged for the articles. Finally the business in forage and other commodities plays a relatively large part in the business of the societies selling to the public, and the profit derived from the sale of these is probably less than that obtained from other articles; sometimes even they are sold at cost price.

It should, finally, be mentioned that 1,376 co-operative societies were affiliated to unions and that 1,512 co-operative societies were formed on a basis of unlimited liability; there were only 186 societies that belonged to no union, and 50 that had not accepted the principle of unlimited liability.

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THE LIVE-STOCK OWNED BY MEMBERS OF AGRICULTURAL CO-OPERATIVE SOCIETIES IN 1914.

Our Correspondent in Copenhagen sends us the following note:

In connection with the ordinary census of live-stock which takes place every five years, questions concerning membership in the agricultural co-operative societies are to be answered by each Danish farmer. Such questions were put at the census taken on July 16th., 1914; they concerned whether or not the owner of the stock was a member of a co-operative dairy, a dairy worked in common (*Fællesmejeriet*), a co-operative bacon-factory, an egg-collecting society, a cow-testing association, a horse-breeding association, a cattle-breeding association, a swine-breeding association, a sheep-breeding association, or a cattle-export society.

On this occasion, only definitely affirmative answers have been counted, so that the figures of the following table are certainly smaller than they should be, as no answer may not in all cases mean "no." Nor, at this Census, have statistics been compiled showing the number of animals belonging to members of co-operative societies. (This was done in 1909; cfr. *Bulletin of Agricultural and Commercial Statistics*, 1910, No. 1).

Number of Herds, etc., owned by Members of Co-operative Societies on July 15th., 1914.

Class of Society	On the Islands	Jutland	Total for Denmark
Co-operative dairies	64,250	89,925	154,175
Dairies worked in common	4,042	8,088	12,130
Co-operative bacon-factories	45,128	6,300	111,428
Egg-collecting societies	29,124	12,633	41,757
Cow testing associations	7,687	8,137	15,824
Horse-breeding associations	6,050	13,054	19,104
Cattle-breeding associations	6,600	11,140	17,740
Swine-breeding associations	2,211	2,452	4,663
Sheep-breeding associations	108	207	315
Cattle-export societies	1,033	7,283	8,316

The number of herds, etc., belonging to members was, as far as the most important forms of co-operative society are concerned, very nearly the same in 1914 as in 1909. There, is accordingly, no reason to suppose that the

percentages of the number of animals belonging to members would be substantially different from the percentages given by the census of 1909.

Rather more than 154,000 herds of cattle belonged to members of co-operative dairies, as compared with 154,600 in 1909, so that only a small change seems to have taken place. This is also the case in regard to the dairies worked in common. A different result is found concerning the co-operative bacon-factories ; in 1914 the members owning pigs numbered more than 111,000 while the corresponding figure for 1909 was about 87,000. This rather considerable growth is partly due to a large increase in the number of swine kept, which was much larger in 1914 than in 1909 ; partly to the fact that the number of members of co-operative bacon-factories was relatively small in 1909, and a much larger percentage of increase was possible than in the case for instance of the co-operative dairies. The number of herds, etc., owned by the members of the different breeding associations seems rather to be diminishing but this may, perhaps, be due to a change in the regulations for the State subsidy according to the Domestic Animals Law of June 8th., 1912.

BRITISH INDIA.

CO-OPERATIVE SOCIETIES IN ASSAM IN 1914-15. — Report on the Working of Co-operative Societies in Assam for the Year ending on the 31st of March, 1915. Shillong, 1915.

The report of the Registrar of Co-operative Societies, Assam, shows that the co-operative movement continued to make satisfactory progress in the province during the twelve months ending March 31, 1915. The number of Central Societies increased from 9 to 10, the number of Agricultural Societies from 224 to 271, and the number of Non-Agricultural Societies from 16 to 20. There was nothing which could be called a new development of the movement during the year, which was natural, in view of the fact that a Committee appointed by the Government of India was at the time investigating the whole question of co-operation. Moreover, it had been agreed that the Registrar's staff in the province was inadequate, and under the circumstances it was considered advisable to discourage the formation of many new societies until the staff should be strengthened. The one additional Central Society recognised is a Banking Union registered a few days before the close of the year ; all the new Agricultural Societies are based on unlimited liability ; and the only instance of anything which might be called a departure from established practice is the recognition of two Non-Agricultural Societies with unlimited liability. Hitherto all the societies of this class in the province have been formed with limited liability.

Of the Central Societies, 2 are classed as Central Banks, 5 as Banking Unions and 3 as Unions. One of the Banks — the Pioneer Central Bank at Shillong — issued loans only to societies ; the other — Silchar Central Bank — lent to individual members as well as to societies. Loans to agricultural

societies by both Central Banks were generally for five years, while the loans made by the Silchar Bank to individuals were made for twelve months or less.

The five Banking Unions are small institutions by comparison with the Central Banks, but they do some useful work, and showed on the year's working a small net profit. They lend to affiliated societies at 9 per cent. per annum which is the same rate as is charged by the two Central Banks.

The three Unions are not allowed to carry on any banking business, and as mere supervising unions they apparently exercise but little control over affiliated societies.

Agricultural Societies made a profit on the year's working of Rs. 18,110 all of which was carried to the reserve fund. The total working capital increased during the year from Rs. 2,54,583 to Rs. 3,47,241. Of the latter amount Rs. 1,29,491 or 37.26 per cent. was internal capital consisting of member's deposits and the reserve fund, while 62.74 per cent. was external capital made up of loans from non-members, from other societies, and from Government. The total sum issued in loans was Rs. 1,70,431, the average per member being Rs. 12. The rate of interest varied from 12 ½ per cent. to 18 ¾ per cent. The principal purposes for which the loans were issued were repayment of old debts (Rs. 52,827), purchase of cattle (Rs. 34,952) and agriculture (Rs. 31,193). The bulk of the loans were issued for terms of from six months to one year.

Non-Agricultural Societies also increased their working capital during the year, in this case from Rs. 2,22,355 to Rs. 2,58,307. Of the latter amount 67.60 per cent. is internal capital, more than half of which consists of member's deposits, and 32.40 per cent. is external capital, consisting for the most part of deposits of non-members. Loans from Government form only 1.02 per cent. of the total working capital. The societies made 532 loans to their members during the year, the average amount per member being Rs. 58. Practically half of these loans (248 out of 532) were issued for the repayment of old debt. The Registrar reports that Non-Agricultural Societies in the province are greatly appreciated by persons of small means and are working on the whole very satisfactorily. He points out, however, that it has not been possible to devote much attention to the urban movement as the efforts of his Department are directed principally to the organisation and improvement of agricultural societies.

SPAIN.

THE FOUNDATION OF "THE CATHOLIC AGRICULTURAL CONFEDERATION OF OLD CASTILE AND LEON." — *La Acción social navarra*, 6th Year, No. 277. Pampelune, 11th. December, 1915.

In November, 1915, on the occasion of the festivities which took place at Valladolid on the inauguration in that town of the *Maison sociale catholique*, the Catholic Agricultural Confederation of old Castile and Leon was

founded during one of the meetings. This was the first step towards the formation of a National Union of Catholic Agricultural Federations which is the aim of these associations.

Although one of the essential articles of the organisation of this Confederation states that " only the agricultural federations of the ancient kingdoms of Old Castile and Leon may become affiliated," an additional article modifies this restriction by stating that " other catholic federations shall be provisionally admitted until such a time as the National Union shall have been established." In fact it may be stated that the Catholic Social Federation of Navarre has become affiliated.

The objects of the Confederation with which we are dealing are to defend the social, agricultural and economic interests of the affiliated federations and to obtain the greatest possible advantages in carrying out its programme. To attain its objects, it will organise and carry on, at an opportune moment and after consulting the federations concerned, the collective purchase of fertilisers, machines and everything necessary for the development of agriculture and stock-rearing, and will arrange for the sale of products, at the same time encouraging reciprocal exchanges between the producers.

The Confederation also proposes to take all the necessary steps to obtain from the public authorities such legislation as is favourable to the rural classes and their organisations.

The Confederation will be directed by a Council consisting of a representative of each of the federations, who must in each case be the President of the federation. These representatives will select, from amongst their own members, a President, Vice-president, Secretary and Treasurer.

The Council of the Confederation will meet in ordinary session at least once a year. The questions to be submitted will be made known to the affiliated federations one month beforehand.

The general expenses of the Confederation will be divided equally among the affiliated federations, and the cost of the co-operative undertakings organised by the Confederation will be borne *pro rata* by the affiliated federations according to the part they have taken in the collective sales and purchases.

As regards collective purchase each federation will make a separate contract with the firms supplying the articles bought with its consent through the medium of the Confederation, and will retain its personality as regards possible complaints and the obligations entailed by the contract.

Finally it is decided that each of the federations shall preserve its independence in carrying out its own programme.

* * *

A SOCIETY FOR THE SALE OF THE PRODUCTS OF THE SPANISH AGRICULTURAL-SOCIAL ORGANISATIONS. — *La Paz social*, 6th Year, No. 104. Madrid, October, 1915.

As the syndicates and other agricultural associations are not, as a rule, organised in such a manner as to be able to find a market for the

various commodities they produce, they have repeatedly requested the Secretariats of *La Acción social popular*, to undertake the sale of these products. However, since all commercial operations, whether direct or on commission, are outside the province of these Secretariats, and as the latter cannot entirely neglect these requests that have been made to them by the above mentioned associations, various members of *La Acción social popular* have thought it well to found a special body for the purpose of establishing these commercial relations which are so necessary for the development of rural societies.

It is in this manner that, under the name of Social Agricultural Union, a society has been founded at Barcelona which offers its services for the commercial representation of syndicates and associations, the management of the sale of their agricultural or manufactured products, and the purchase of the commodities and implements required by their members. In every case, the Social Agricultural Union will receive a very small commmission in its capacity as agency for sale or purchase. This commission will be fixed in each individual case on the receipt of the offers or demands, for it is impossible to fix it beforehand, as a general rule, on account of the diversity of the transactions which may have to be carried out in the course of business.

The society offers the highest guarantee since the character of the Catholic agricultural class which composes it insures the strictest safe-guarding of the interests of the associations it represents ; further, the society is careful never to effect sales except with perfectly solvent firms and individuals. Nevertheless, in the case of societies that wish to have their sales specially guaranteed, the Social Agricultural Union will give a guarantee against bad debts, even in the case of the insolvency of the purchaser, on the commission being raised 1 per cent.

This new institution has been received with special satisfaction in Spanish rural circles, in particular by the Catholic Associations, many of which have have already authorised the Social Agricultural Union to act as their agent.

* * *

THE WORK OF "THE CATHOLIC SOCIAL FEDERATION OF NAVARRE" IN 1914-15. — *La Paz social*, 6th Year, No. 104. [Madrid, October, 1915.

On September 24th, 1915, the General Meeting of this Federation was held at Pampelune for the purpose of giving an account to the affiliated societies of the work done by the Federation during the last business year (1914-15). Fifty-nine delegates of these societies attended the meeting.

The Secretary of the Federation read the annual report on the work done, which report contains not only interesting data respecting the work, but also general information regarding rural association in Navarre. These data may be summarised as follows :

One of the clearest proofs of the activity of this Federation consists in the efforts it has made to compile exact and detailed statistics of all the agricultural-social organisations existing in Navarre. To this task it has devoted much of its energy during the course of the year which has just drawn to a close, either by directly obtaining information, or by sending forms of enquiry to different districts. Although it had not yet been possible to obtain all the data necessary for the presentation of complete statistics, the work of collection was sufficiently far advanced at the end of the business year 1914-1915 to admit of some figures being given, which, although incomplete, still present a certain interest. The figures are as follows:

Agricultural Social Organisations in Navarre.

Registered Rural Banks	148
Various Agricultural Associations	7
Agricultural Syndicates	32
Co-operative Distributive Societies	11
Co-operative Mills and Bakehouses	2
Co-operative Wine Societies	2
Recreation Clubs	8
Total	210

In these figures no distinction has been made between the associations which do business regularly and those that are only nominally active, and which do no business, or from time to time transact some operation of little or no importance. If this distinction were made, it would be necessary to subtract from the above list 28 rural banks and 28 syndicates; thus there would remain 154 associations that are actually doing business. (1)

Hitherto the Federation has obtained detailed data only in the case of 72 rural banks. According to these data these 72 rural banks had 9,271 members; they had at their disposal savings deposits to the value of 1,343,932 pesetas; they had a social fund of 166,820 pesetas; the value of the proprty belonging to them amounted to 665,693 pesetas; and the total of the loans made to their members amounted to 1,388,076 pesetas.

If we examine the collective transactions effected by the Federation, we find that the principal purchases made in 1914-1915 may be divided as follows: fertilisers 4,905,275 kgms. — autumn and spring seasons — to the value of 513,790 pesetas; seed potatoes; 9 ½ wagon-loads, to the value of 16,531 pesetas; rye for sowing 2,800 kgms. of the value of 1,119 pesetas; mechanical sorters 4 for 1,532 pesetas; " Siral " binder-twine 1,030 balls which cost 4,531 pesetas; baskets 92,000 for 1,267 pesetas. The total of

(1) Taking into account the area and the population of Navarre (10,506 square kilometres and 312,235 inhabitants) there is one agricultural association for every 63 square kilometres or for every 2,027 inhabitants.

the collective purchases made for the federated societies amounted to 538,770 pesetas.

The following are the details relating to the work of the *Credit Section* of the Federation.

Business of the Credit Section in 1914-1915.

	Value in pesetas in —		
	July, 1914	December, 1914	June, 1915
Loans made	31,777	50,616	93,454
Current accounts	7,803	17,438	26,104
Deposits	56,981	80,638	189,184

The guarantee funds of the credit section were, at the end of the business year, 15,060 pesetas furnished by the federated rural banks and 870 pesetas supplied by the Federation.

The receipts and disbursements of the Federation from January 1st to August 31st, 1915, amounted to 2,829,323 pesetas.

We may remark in conclusion that the meeting in question passed some important resolutions dealing in particular with the extension of co-operative purchase operations to agricultural machines and seeds, with the federation of the co-operative distributive societies of the region for the purpose of establishing a co-operative warehouse, etc.

FRANCE.

AGRICULTURAL, MUTUAL, CREDIT AND THE WAR. — LOUÉE (G.) in *Bulletin des Syndicats agricoles du Jura*.

The action of the Regional Bank of Mutual Credit of Burgundy and Franche-Comté during the war may be summarised as follows: At the beginning of the war, the total deposits for which the Regional Bank and the local banks were responsible amounted to the sum of two and a half million francs. The deposits belonged to about 3,000 individuals, all small capitalists and thrifty cultivators, who, having accumulated a small sum of money by dint of toil, were the more liable to the fears that might take possession of the public at the beginning of hostilities.

These societies found themselves in the same position as the Savings Banks and other institutions of credit that were in direct contact with the savings of the people, and like these they were liable to see their clients insist upon their deposits being refunded.

Their situation, however, has been quite different: no demands have been made for repayment: there was no need for a moratorium. They have even received, since the beginning of the war, new deposits of the total value of 120,000 francs.

In the country districts, the people are only too much inclined to believe that debts need not be paid during the war, and one might be inclined to predict that the repayment of small debts would be suspended, the moratorium having, moreover, deferred the time of their falling due to an undetermined date.

The agricultural credit institutions of Burgundy and Franche-Comté have upset the least pessimistic forecasts of this kind and proved themselves capable of facing the most critical situations. In fact, the Regional Bank, seeing that the cultivators were realising large sums on account of the requisitions and the rise in the prices of the products of the soil and of cattle, insisted on the local banks obtaining at least partial, if not complete repayment, whenever the condition of the borrowers permitted it, without in any way involving in difficulties the families of the men mobilised. Since the beginning of the war the sum of 434,000 francs has been received under the head of repaid loans.

With the deposits entrusted to it, and the repaid loans *plus* the sum standing to its credit with its banker at the beginning of the year and which the banker paid into it, the Regional Bank has bought over 900,000 francs worth of Treasury bonds.

Part II: Insurance and Thrift

SWITZERLAND.

LEGISLATION AND REGULATIONS CONCERNING AGRICULTURAL INSURANCE.

By Doctor G. Rocca.

§ 1. General remarks.

The articles published in this *Review* on the progress of insurance in Switzerland in the years preceding 1913 have been completed to include that year on the basis of the last annual report of the Federal Insurance Office (1). In view of the outbreak of the European war, the Federal Office justly observed in the report referred to that the working year 1913 closed a series of years more or less normal, and the results of that year's working, therefore, are the more favourable for the study of the development and the history of insurance in Switzerland. For several years a general crisis had been felt in economic life, while the political situation was giving rise to much uneasiness; and so, in the various branches of agricultural insurance in 1913, there was by comparison with the previous year, a diminution in the amount of premiums or, if any increase absolute or relative was recorded, it was much less than it had been for many years.

Since the greater number of Swiss or of foreign companies or societies working in Switzerland have also branches in the belligerent States, insurance suffers from the effects of war even in a neutral country like Switzerland. These effects are very clearly shown in the report mentioned. The insurance societies in general were prepared for grave events, and when any opportunity occurred, the Supervising Office insisted on the necessity of forming solid reserve funds. Many societies, desirous of extending their

(1) See Vol. 32, No. 8, August 1913, page 70; Vol. 48, No. 12, December, 1914, page 27 Vol. 59, No. 11, November, 1915, page 45.

business in Switzerland, could not obtain the necessary authorisation from the insufficiency of the guarantees they offered. The law relating to the supervision of insurance companies respects and takes into account their international character. It is evident, however, that the working of an international society at the present time meets with serious difficulties. Delays and interruptions in communication, the temporary cessation of many commercial undertakings, Governmental provisions regarding economic life, and all the other obstacles arising from a state of war, cannot but hinder the extension of vast undertakings of an international character. Insurance and war are irreconciliable : insurance cannot really prosper except under the reign of peace and order.

A few figures will suffice to show the progress in all forms of insurance made in Switzerland during the long period of peace which closed with 1913. In 1886, the year in which the Government Supervising Office was established, the premiums paid for insurance of various forms amounted to 22 million francs, in 1913 to about 109 millions, that is to five times as much. During the 28 years from 1886 to 1913 the total expenditure of the people of Switzerland in insurance premiums with private companies alone, amounted to more than fifteen hundred million francs, the exact figure being 1,562,189,819 francs. This sum, which must be considered high for a small country like Switzerland, is divided as follows: — 871 million francs spent in premiums for life insurance, 329 million for accident and liability insurance, 262 million for fire insurance, 57 million for transport insurance, 19 million for hail insurance, 9 million for cattle insurance, 6 million for plate glass insurance, and more than 88 millions for other more recent forms of insurance (insurance of water-conduits, insurance against burglary, fidelity insurance, insurance against bad debts, etc.).

With regard to agricultural insurance, it may be observed that in 1886 the premiums against damage by hail amounted only to 121,457 francs and those for cattle insurance to 16,231 francs, while in 1913 they amounted respectively to 1,107,435 francs and to 638,318 francs.

In 1915 thirty years had passed since the Federal Assembly of the Confederation, approved the federal law relative to the inspection of private insurance companies, and in agricultural insurance also in this period a regular and constant progress is to be observed in the amount of the sums assured and in the number of contracts. The Federal Office observes that perhaps the consequences of the changes in the economic international situation are less intensely felt in insurance than in other fields of social life, because instability in economic life is undoubtedly one of the causes that induces the public to insure. It is well to remember that all insurance companies in Switzerland are subject not only to the law of 25th June, 1885, which places them under the supervision of a Government office established at Berne, but also to the law of 2nd April, 1908, in force since 1st January, 1910, which definitely fixes the principal clauses of insurance contracts.

Only in Switzerland and Germany has it up to the present been thought necessary to place any legal restrictions on liberty of insurance contracts. In the report for 1907 of the Federal Office the motives for such legislation

were clearly explained as follows. The public, generally speaking, is still strongly prejudiced against private insurance companies, and in consequence their extension is much hindered. An insurance agent has a difficult task in overcoming these prejudices which arise in many instances from the fact that the applicant for insurance feels himself unable to understand the full significance of his obligations, whilst the insurer has the advantage of him in this respect. Insistence on a prescribed form of insurance contract tends to strengthen confidence in the companies, thus rendering them more accessible to the public.

Questions are often addressed to the Government authorities by persons insuring, with regard to clauses in the contracts, the perfect legality of which is easily recognisable by an expert. In such cases it is much less difficult to refer the applicant to a definite law in which the clauses referred to are embodied than to give him detailed explanations. The law on insurance contracts has in another respect aided, and continues to aid the extension of insurance, namely, by instructing the public as to the scope and nature of insurance. The rules it enforces in an imperative manner as the fundamental basis of an insurance contract will, little by little, become known to the public, and all will be able to comprehend more easily the rights and obligations involved in the contract itself. The law contains some few provisions which may not be altered in the contract ; other provisions, which indeed, may be altered, but only in favour of the insured person. With the exception of these clauses, the liberty of contract is fully guaranteed.

The Federal Office must examine if the conditions of insurance of the companies working in Switzerland are in conformity with the law on insurance contracts, and must, in particular, be satisfied that none of the conditions are contrary to the mandatory provisions of the law. It must exercise constant vigilance that the conditions imposed may at all times conform to the accepted principles and approved practice of the science of insurance, making modifications or suppressing whole clauses if they are not justified by experience. From the first year of the application of the law, the authorities had to decide various questions as to its proper interpretation. Thus, in the case of insurance against damage, the law has two important rules with regard to the obligation of the insured party to reduce as far as he can the extent of the damage, and with regard to the payment of salvage expenses. Art. 61 reads : — " In case of loss, the claimant is obliged to do all he possibly can to reduce the damage done. If delay would not be prejudicial, he must seek instructions from the insuring company as to the measures he should adopt, and act accordingly. If the claimant fail in this respect without good reason the insurer may reduce the compensation to the amount it would have been had the obligation been fulfilled." Art. 70 adds : — " If the claimant has not incurred unreasonable expense for the purpose of reducing the damage, the insurer is obliged to reimbourse the amount, even if the measures adopted were unsuccessful, and if the said expense, added to the indemnity exceed the amount of the sum insured.. etc. " The Federal Office, appealed to as to the application of these clauses in the matter of cattle insurance, decided that in insurance of this kind the expenses for

maintenance, veterinary assistance and medicines cannot be considered expenses of salvage in the sense of Art. 70 above quoted. The payment of these expenses is not equivalent to payment for salvage operations which the insured person is obliged to undertake by the terms of Article 61 already referred to. The obligation to effect salvage related to the furnishing of means or the taking or prompt action for the purpose of saving that which is the subject of insurance from loss or damage. In the legal sense, therefore, it includes measures which cannot be foreseen and which vary according to circumstances. The obligation of obtaining veterinary assistance for the injured animal is a necessity constantly arising when the illness or accident is not followed by death. This expense forms a separate risk not difficult to assess, analogous to the medical expenses in accident insurance. The Federal Office therefore concludes that it would the unfair to compel the insurance company to pay the expenses in question without the payment of an additional premium on the part of the insured party.

§ 2. Cattle insurance societies and companies. The "Mutuelle chevaline suisse."

Unlike preceding years, cattle insurance was accepted in 1913, not only by mutual societies, but also by a share company. The mutual societies are: the *Mutuelle chevaline suisse* of Lausanne, the *Badische Pferde-Versicherungs-Anstalt A. G.* of Carlsrühe, and the *Garantie Fédérale* of Paris; the share company is the *Perleberger-Versicherungs-Aktien Gesellschaft* of Perleberg in Prussia.

The chief risks accepted by these companies are the death of the animal through disease, accident, a surgical operation by a veterinary holding a diploma, castration, slaughtering, and depreciation of value through disease or accident by which the animal was incapacitated for the special use to which, according to the insurance policy it was destined, without its becoming necessary to slaughter it.

The Baden society cannot have recourse to supplementary premiums unless the annual receipts, any profits which have been made, and a third of the reserve fund, should be insufficient to cover the expenses.

This society obliges insured owners to carry 10 per cent. of the risk in order to give them an interest in the care of their cattle and in the prevention of casualties and diminution of losses. In the case of the animal's natural death, the return from the sale of the carcass is not included in the 80 per cent. of the value insured by the company, and the carcass therefore belongs to the insurer; but in the case of the slaughter of a horse the compensation paid by the society only amounts to 70 per cent. of the value, and the profit of the sale of the carcass either goes to the society or is deducted from the compensation.

The *Perleberger-Versicherungs-Aktien Gesellschaft* only began in 1913 to extend its insurance transactions to butchers' beasts in Switzerland.

This is a share company working only on the system of fixed premiums, excluding any supplementary levy on the insured parties. To this system there are serious objections when it is adopted by mutual societies, because in case of deficit the mutual society must proportionally reduce the compensation, and thus the insured party never knows beforehand how much he will receive in case of a loss, whereas in the share company these objections do not arise. The results obtained by the *Perleberger* are the more interesting because capital is seldom invested in this branch of insurance; as a rule in all countries limited liability companies refuse transactions of this kind, either because they do not yield large profits, or because they fear the competition of local mutual societies. In fact, the risks of mortality among cattle largely depend on the owner, the care he takes of his cattle, and the measures of precaution applied by him. It would seem that local societies are in a position to impose on owners the strict application of the measures in question. But a large share company may group a great number of risks and thus put into force the law of high numbers; it may have a more efficient technical staff, and thus be in a position, while reducing the cost of administration, to offer moderate rates to the public.

The *Garantie Fédérale* of Paris is an example of a mutual society with fixed premiums.

For several years the Federal Office insisted that the *Garantie Fédérale*, like other companies for insurance against damage, should form a special reserve for outstanding risks. In the report for 1907 the system adopted by the *Garantie Fédérale* was described as the substitution of the reserve fund for the ordinary reserve for outstanding risks; when the ordinary receipts were not sufficient to cover the expenses of the current year, the rules gave permission to draw upon the reserve fund up to a quarter of its amount, for the sum required. The reserve fund was formed by a special contribution from the members in a certain proportion to the sums assured every year, and of the interest of the sum constituting the fund itself. In the report for 1909 the deficiencies of the system are clearly shown. According to the rules of the company the year of insurance is calculated from the day of admission to membership; but the company considers as received, and calculates in the annual income, the whole amount of the premium without carrying over any part of it to the following year, in order to cover the risk during the rest of the insurance year. It is true that the company believes that it has in the reserve fund an equivalent for the reserve to cover outstanding risks, but though this fund was in 1909 formed differently from in preceding years (namely, by a contribution of 2 per cent. on the net premiums, and by the excess of receipts over expenses) yet the working of the insurance shows the necessity of a special reserve for outstanding risks. In 1911 the company accordingly began to form such a reserve, allocating to it a sum of 16,000 francs; but the Federal Office declared that this was insufficient for the risks. In 1912 it was increased to 50,000 francs, and at the close of 1913 it amounted to 24,000 francs, while the general reserve fund of the society exceeded 83,000 francs at that time. The efficient work done by the Federal Office in sup-

plying insured parties with increasingly safe guarantees is everywhere acknowledged. This Office points out that in 1913 the *Garantie Fédérale* formed a reserve fund for outstanding risks for the French section, allocating to it a sum of 11,559 francs and also for the same section another special contingency reserve of 50,000 frs. But all these reserves are still far from sufficient to meet the losses of that part of the insurance year which extends beyond the close of the financial year.

In fact for those companies which like the *Mutuelle chevaline suisse* make the financial and insurance years correspond the formation of a special reserve fund for outstanding risks is by no means necessary. But it is necessary when the dates of the payment of premiums do not all fall at the end of the financial year, and when the financial year closes before the expiration of the insurance year, that is to say, the period (generally a year) for which the company has assumed the risk. In this case the reserve should correspond to the unexpired portion of the risk; thus, for example, if the contract of annual insurance is dated 1st April, the accounts of the current year closing on the 31st December, should pass on to the accounts of the following year a fourth part of the risk still carried by the company, and the reserve of the premiums to the 31st December should correspond to the fourth part of the premiums paid during the year, *i.e.* net premiums minus the cost of reinsurance and part of the cost of administration. As shown in the following table, the manner in which the reserve for outstanding risks is formed varies in the different companies.

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With regard to the investment of liquid assets by cattle insurance companies, it is interesting to observe that the *Mutuelle chevaline suisse* in 1913 invested all the liquid assets it possessed (17,384 francs) in securities guaranteed by the State; while the *Badische-Pferde-Vers. Gesellschaft* out of a total of liquid assets amounting to 140,801.25 francs invested 87,851.50 francs in Government securities and 52,948.75 francs in bonds of banks, railway companies and other industrial undertakings. The *Perleberger* out of a total of 234,184.50 francs invested 74,437.50 francs in Government securities, and 159,747 francs in various securities, not included among industrial shares or bonds or among municipal bonds. Lastly, the *Garantie Fédérale*, out of a total of 107,807 francs invested 82,655 francs in securities guaranteed by Government, 22,416 francs in municipal or departmental bonds, and 2,736 francs in other securities.

TABLE I. — *Live-stock Insurance Societies and Companies.*

Profit and Loss Account.

Receipts	Mutuelle chevaline suisse	Badische Pferde Vers. Anstalt	Perleberger Vers. Aktien Gesellschaft	La Garantie fédérale	Mutuelle chevaline suisse	Badische Pferde Vers. Anstalt	Perleberger Vers. Aktien Gesellschaft	La Garantie fédérale	Expenditure
	Frs.	Frs.	Frs.	Frs.	Frs.	Frs.	Frs.	Frs.	
Brought forward from previons account . .	—	—	—	928.21	193,588.45	1,027,068.36	2,506,790.26	523,926.85	Claims paid
Reserve for ontstanding risks	(1) —	458,860.63	51,159.49	[2])20,000.00	21,619.75	128,679.45	131,224.04	137,829.35	Commissions and agency expenses
Reserve for current claims	9,000	53,096.25	20,751.49	—	26,185.30	111,646.78	446,595.53	112,067.46	Gencral expenses and taxes
Other reserves	—	—	15,937.50	—	396.50	4,091.88	3,682.00	—	Depreciation of securities
Premiums paid	241,129.55	1,267,199.25	3,101,449.96	865,635.83	(1) —	475,074.56	66,551.61	35,559.60	Reserve for ontstanding risks
Profits on investments	483.05	27,562.19	19,761.49	—	11,000.00	63,012.20	20,832.25	—	Reserve for current claims
Iucreased values of securities	—	692.50	—	—	—	1,958.39	14,687.50	56,000.00	Other reserves
Charges to cover policy-tax	4,607.40	4,784.62	6,959.00	—	752.35	—	5,075.06	36,500.00	Sinking Fund
Other receipts	—	53,219.30	12,659.36	27,583.47	536.40	(3) 39,439.16	11,312.16	12,224.25	Other expenses
Total . . .	255,220.00	1,865,415.08	3,228,670.29	914,147.51	254,078.75	1,850,970.78	3,206,750.61	914,147.51	

(1) The *Mutuelle chevaline suisse* has not formed a reserve for ontstanding risks because the end of the financial year corresponds with that of the insurance year. — (2) Only for contracts made in Switzerland. — (3) Paid to the reserve fund.

The figures in Table I showing the profits and losses of the four companies (as also the figures in the following table showing the balance sheets) all, except those of the reserve fund for outstanding risks of the *Garantie Fédérale*, refer to the whole number of completed transactions, and therefore, in the case of the *Badische* and of the *Perleberger* include also the business done in Germany.

The *Mutuelle chevaline* and the *Badische* as shown by Table I, put all their profits, respectively 1,141.25 francs and 14,444.30 francs, into the statutory reserve fund, while the *Perleberger* divided its profits (21,919.68 francs) between the statutory reserve fund (1,536.65 francs), the shareholders (12,500 francs) and other participants (7,883.03 francs).

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All the companies reserve to themselves the right of recovery from those who are responsible for the loss ; and when the insured party has a right in case of loss to compensation from the State, the Commune or an individual, under any pretext whatever, the indemnity is proportionally reduced. This is in accordance with the principle that insurance should never be a source of profit to the insured party.

By Art. 64 of the federal law on insurance contracts, the amount of compensation in the insurance of live-stock must, as a rule, be determined according to the value of the animal immediately before the illness or accident. This provision, though not imperative and therefore liable to be set aside, was inserted in order to protect insured parties, and to compel the companies in their policies to conform to its conditions. The general principle in insurance against accidents is that the insurer should pay compensation according to the value of the subject of insurance at the moment of the accident ; but if this rule were observed, the insured party would very often not obtain an indemnity equal to the loss, because the value of the animal at the moment of death is much diminished in consequence of the disease or accident.

TABLE II. — *Live-stock Insurance Societies and Companies in* 1913.

Balance Sheets.

Assets	Mutuelle chevaline suisse	Badische Pferde-Vers. Anstalt	Perleberger Vers. Aktien Gesellschaft	La Garantie fédérale	Mutuelle chevaline suisse	Badische Pferde Vers. Anstalt	Perleberger Vers. Aktien Gesellschaft	La Garantie fédérale	Liabilities
	Frs.	Frs.	Frs.	Frs.	Frs.	Frs.	Frs.	Frs.	
Liabilities of the shareholders or guarantors	7,000.00	—	937,500.00	—	15,000.00	—	1,250,000.06	—	Guarantee capital.
Cash	1,364.15	5,745.14	6.092.86	7,753.30	10,000.00	278,505.19	89,708.57	83,271.91	Statutory reserve.
Buildings and fixtures.	—	—	140,000.00	—	—	28,097.24	—	56,000.00	Special reserves.
Mortgage Loans	—	543,828.86	75,000.00	—	(1) —	275,074.56	66,551.81	35,559.60	Reserve for outstanding risks.
Loans on chattel security	—	7,319.54	—	—					
Securities	10,387,00	132,526.25	221,684.50	98,595.50	11,000.00	63,012.20	20,832.25	—	Reserve for losses to be settled.
Caution-money	6,997.00	36,372.24	12,500.00	9,211.50					
Deposits in banks	5,034.00	14,788.75	15,766.51	28,099.45	—	—	—	11,43.45	Commissions and other expenses to be paid.
Due from agencies and insured persons	3,149.70	103,822.72	172,919.55	119,570.04	329.45	1,999.10	108,121.04	15,367.00	Various creditors.
Various debtors	—	2,103.34	50,134.98	68,191.67	—	—	91,832.80	142,489.51	Miscellaneous
Interest and rents to be collected.	—	5,313.34	750.00	—	1,141.25	14,444.30	21,919,68	—	Profit and Loss Account (Balance Profit).
Furniture and office-fittings	3.538,85	8,750.60	11,929.94	—					
Various	—	562.50	4,687.81	2,410.00					
Profit and Loss Account (Balance Loss)	—	—	—	—					
Total	37,470.70	861,132.59	1,648,966.15	333.831.46	37,470.70	861,132.59	1,648,966.15	333,831.46	Total.

(1) *Mutuelle chevaline suisse* has no reserve for outstanding risks since the financial year corresponds with the insurance year.

Art. 66 adds that if the subject insured be defined in general terms, each and every class which falls under the general definition at the moment of the accident shall be considered insured. Thus the death or disease of one among a number of animals insured does not entitle the insurer to determine the contract, but he is still responsible up to the amount of the remainder of the sum insured. This provision is especially important in the insurance of live-stock among which a succession of losses may occur, and if the insurer may determine the contract immediately after an animal has become a loss, the insured person may perhaps receive no compensation at the moment when he needs it most.

Lastly, the law itself obliges the insured party in case of accident, to give immediate information of it to the insurer, and to have recourse to a veterinary or other expert. The insurer is freed from his obligation if the insured party either purposely or through negligence have caused the accident ; for instance the fact of not having called a veterinary in time may be considered as grave neglect.

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We have already had occasion to describe in this *Review* (Vol. 48, No. 12, December, 1914) the administrative and financial organisation and development of the largest company in Switzerland for insurance against damage by hail — *La Société suisse d'assurance contre la grêle*, and it seems desirable here to give a brief outline of the working of the *La Mutuelle chevaline suisse*, the only society of Swiss nationality, as we have seen, which accepts insurance of this kind.

It was founded in 1901 under the auspices of *La Fédération des sociétés agricoles de la Suisse romande*. Its headquarters are at Lausanne ; its rules in force are those drawn up by the General Meeting of members held on the 9th February, 1901, and amended by resolution on the 15th June, 1907, and the 8th October, 1909.

Some of the general provisions in the first chapter of the rules are worthy of notice as being drawn up according to sound principles of order and practical utility.

By Art. 1 the company guarantees its members according to the provisions of the policy, against losses through mortality among horses, mules and asses insured by them. The insurance cannot be extended to other risks except by permission of the General Meeting.

The members of the society are distinguished as active, associate, or honorary. Active members are those who posses animals that may be insured, or any person interested in keeping them. Such persons, on signing the policy, may be admitted by the Committee of Management. Associate members are those who, while adhering to the principle of mutual

insurance, are for the time bound by other contracts, or those who from their profession (veterinary surgeon, etc.) take special interest in horses. Honorary members are persons who have rendered important services to the society: they can be nominated only by the General Meeting. This classification of members seems worthy of consideration by many other societies; especially the creation of the second class consisting of the so-called associate members, may induce many persons interested in the improvement of veterinary science and sanitation to give their support to the company.

Membership is from year to year; any person wishing to resign at the end of the working year (31st December) must send a notice of resignation by registered letter addressed to the Manager, at least three months previously.

The cases in which a member may be expelled are clearly laid down in Art. 8 of the rules; the Committee of Management not only has the right of determining every contract at the end of any year by giving three month's notice, but may also declare the expulsion of any member who damages the interest of the Association:

(1) by carelessness or serious negligence duly proved;

(2) by returning false information;

(3) by a delay of more than two months in paying the premium or other sums due to the company. If the latter case before resolving on expulsion, a request for payment should be sent by registered letter.

In the first two cases the justice of expulsion will be apparent if we remember that in this branch of insurance the occurrence of a risk depends in a great measure upon the goodwill and the diligence of the insured party, and that frequent attempts to defraud are made, whether by declaring animals to be diseased which are not insured, by giving incorrect information about the animal's state of health, or by delaying to give notice of an accident, etc. As to expulsion for delay in payment, it is easily explained by the necessity of ensuring the financial position of the company.

Any person ceasing to belong to the society loses all right to share in its net assets; a member who resigns or whose contract is determined, ceases to be insured at the expiration of the term for which his last premium was paid, but in cases of expulsion for carelessness or negligence or false information, the society has the right to close the insurance at once. In this case the account of the expelled member is settled from the date of expulsion, and should it close with a credit to him, the surplus will be retained by the company as a guarantee for the fulfilment of the member's obligations with regard to supplementary premiums, until the close of the financial year.

Members are exonerated from all personal responsibility as to the obligations of the association.

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(a) *Administrative Organisation of "La Mutuelle chevaline suisse."*

The Society is administered by (1) the General Meeting, (2) the Committee of Management, (3) the Manager, (4) the Supervisors. The members meet in General Meeting, ordinarily once a year, and extraordinarily whenever the Committee of Management may consider necessary, and whenever twenty active members make a requisition for a meeting in writing to the Committee.

It is the duty of the General Meeting to fix the general conditions of insurance policies; to deliberate on the Rules and on necessary alterations; to decide on the amount of supplementary premiums when they must exceed 30 per cent. of the original premium; to appoint the members of the Committee of Management and the Supervisors; to consider the complaints of excluded members and all proposals made by members; and all those necessary subjects which do not fall within the purview of the Committee or the officers.

The Committee of Management when calling the meeting fixes the date on which it shall be held. When the requisition to summon is made by the members, Art. 23 of the Rules wisely declares that the date of meeting must be within three weeks from the presentation of the requisition. Except in cases of urgency, the meeting takes place at least ten days previous to the end of the three weeks, notice of the subjects to be discussed having been given to the members individually. To prevent frequent causes of dispute, the General Meeting, is forbidden to deliberate on any subject not appearing in the agenda; proposals for new subjects for insurance must be presented in writing to the Committee of Management at least seven days before its meeting, and proposals presented the General Meeting are not put to the vote until the next meeting.

Every active member has only one vote in the meeting. Members unable to attend may be represented by another member holding a written proxy; no member, however, acting as proxy, shall cast more than two votes in addition to his own. This restriction is very necessary to prevent the formation of artificial opposition or of fictitious majorities and at the same time it induces members to be present at the meetings. The associate and honorary members have only the right of discussion without that of voting.

Resolutions are passed by a simple majority of the members present in person or by proxy. To decide concerning a deduction from the reserve fund or to make any change in the rules there must be a majority of three-fourths. Amalgamation with other societies or dissolution can only be resolved upon by an absolute majority of active members. If this, however, cannot be attained, the question may be decided in a new meeting by a majority of two-thirds of the members present in person or by proxy. Votes are

taken by a show of hands; elections by secret ballot unless the Meeting decides otherwise. Members of the Committee and Supervisors have the right to claim for each meeting reimbursement of travelling expenses and an attendance token.

The Committee of Management, according to Art. 90 of the Rules, is composed of members variable in number from nine to fifteen appointed by the General Meeting for four years, a third part to retire every two years. In 1914 this Committee was composed of eleven members, and it is to be observed that of these the President was director of the public abattoirs of Lausanne, one member was a professor of the Veterinary Faculty of Berne, another was head of the Department of Agriculture at Fribourg, the Secretary and three other members held veterinary diplomas, another was a cattle-breeder, and so on. Thus, we see that the technical element was well represented, and that this society progresses in connection with preventive hygiene and the cure of cattle diseases.

Amongst the functions of the Committee of Management are the appointment of the Manager of the society and the staff, the arrangement of their duties, their salaries, etc., administration of the funds of the company, and the fulfilment of its obligations as imposed by the Rules, decision on the admission or exclusion of members, calling of the general Meeting, preparation of accounts etc. The Committee appoints from amongst its own members the President, the Vice-president and the Secretary, but the President and Secretary may be chosen from outside the members and the Committee.

For the management of the assets of the society and for the carrying out of its purposes, the Committee is granted the most ample powers; it may even make modifications in policies, represent the association to third parties, take legal proceedings either by way of agreement or compromise, invest the assets of the company as it considers best, and even sell by private treaty all movable or immovable property belonging to the company.

The President of the Committee of Management treats with the Manager of the society and with third parties as delegate of the Committee, manages the legal affairs, and may claim an adequate honorarium for the time he devotes to the affairs of the society beyond that spent in the sessions of the Committee.

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The conduct of business is entrusted to a Manager. He surpervises all the departments of book-keeping, correspondence, accounts, and records. He decides as to the settlement of claims which must afterwards be submitted to the Committee of Management; he also represents the society in legal matter and to third parties, within the limits of the powers conferred upon him by the Committee of Management. He controls the

staff both administrative and technical. For this last, composed of agents and veterinary surgeons the company spent in salaries in 1914 more than 20,000 francs.

The Council of Supervision is composed of three Supervisors and two deputies nominated year by year by the ordinary General Meeting. Their duty is to audit the books of the society and to report to the General Meeting on the past financial year. They also examine the balance sheet and give their opinion respecting it. They have the right and the duty of inspecting at any time (at least once in six months) the accounts of the society. The Rules do not here speak of compensation or tokens of attendance

It should be observed that if divergencies should eventually rise between the Committee of Management and the members, Art. 39 of the rules does not entrust the decision to the Council of Supervisors as is done in many other societies. It provides much more wisely for the protection of the interests of the members by appointing a *Council of Arbitration* composed of three persons, two of whom are appointed by the contending parties, and the third nominated by the first two. Should the first two not agree in the choice of the third, or should one of the contending parties refuse to nominate an arbitrator, the competent court of the district makes the required appointment.

In accordance with the general principle of the law of civil procedure that personal and real actions respecting movable property against a society must be brought before the legal authorities of the place in which the society's headquarters are situated, or where it has a branch establishment with a representative, Art. 39, of the rules declares that the society shall select in every canton in which it works, a legal domicile in which, as in the place where its headquarters are situated (Lausanne), it may be sued in connection with all the obligations inherent in the insurance policies of members living in the canton. The obligation to select a legal domicile in every canton in which the society does business is, as we shall see, enforced also by the federal law respecting the supervision of private insurance firms (Art. 2, Nos. 3 and 4).

In 1913 the company had 25 legal domiciles and transacted business in every canton of the Confederation.

(b) *Technical and Financial Organisation.*

The receipts of the company are derived chiefly from (1) entrance fees, (2) annual premiums, (3) supplementary premiums (4) contributions to the general expenses. Members, both active and associate, on entering their animals, pay fees of which the amount is fixed every year by the Committee of Management; in 1914 the fee for the first horse entered by any member was three francs, and, for every additional animal, one franc up to a maximum of 20 francs.

Active members alone pay a premium, the amount of which is fixed year by year by the Committee of Management at so much per cent. of the insured sum. In 1914 this tariff in the *Mutuelle chevaline suisse* as we were kindly informed by its Committee of Management, was as follows:

	Up to 1200 fr. per head	From 1200 to 1800 fr. per head
	—	—
(1) Horses for agricultural use	2.50 %	3 %
(2) Carriage and saddle horses (private); horses for commercial use, foals, asses, mules	3 %	4 %
(3) Mares for the use of veterinary surgeons, trained horses, horses of medium draught	3.50 %	4.50 %
(4) Horses of heavy draught, as those of millers and carriers; hotel horses, horses for postal diligences, omnibus and hackney carriages	4.50 %	5 %
(5) Tram-horses, horses for hire, horses of tradesmen outside the city, horses for travelling	5 %	5.50 %

Should the amount of the annual premium be changed, members must receive notice before the month of January; they will be responsible until the end of the current financial year. The premium is to be paid in advance year by year, as are also entrance fees.

The insurance contract does not come into force until the proposal is accepted by the Committee of Management. The policy will then be given to the insured party duly signed by two members when he has paid the premiums for the current year and the entrance fee. The insured party must pay the premiums, without intermediaries, directly to the Committee or by post the day following that on which it is due; the premium may be collected at the house of the member or by post; but in either case at the expense of the defaulter. It is to be observed that the company guarantees reductions in premiums and policies to members of horse-breeding associations for their mares, to grazing companies for foals during the grazing season, to individual proprietors who wish to ensure their foals only for the grazing season and to communal authorities for horses requisitioned in case of fires.

If the premiums are not sufficient to cover the working expenses the Committee of Management arranges for the payment of a supplementary premium at a given percentage on the premium already paid. Should this be above 30 per cent. of the original premium, the Committee must call the General Assembly which should provide for it according to the needs of the case. Members must also pay in to the general expenses one franc for every insured animal and for every alteration in policy rendered necessary by change of risk relative to the value of the animal, its use or its removal to another locality.

When there is a credit balance in the annual accounts the society must apply it to the formation of a reserve fund. Any member delaying pay-

ment of any sum due to the company (premiums, supplementary premiums, etc.), is given notice, at his own expense, of the day from which the benefits of his insurance will be suspended, every delay of a month from that date will authorise the society to suspend its obligation with regard to losses which might occur after that date. On the other hand, the obligations of the member continue during the period of suspension and he must pay the premium relating to this period. The benefits of his insurance recommence immediately on his payment of arrears.

In case of dissolution of the society, the balance in hand must be divided amongst the members of the society at the time, at so much per cent. of the premiums already paid. If the share capital be not sufficient to pay the compensations due on accounts of losses which happened after the decision for dissolution, the Committee of Management is authorised to levy a supplementary premium amounting to the sum required.

In the report for 1914 presented by the Committee of Management to the ordinary General Meeting held on the 26th June of last year, there are many interesting particulars of the consequences of the war with regard to this species of insurance. The general development of the society from the year of its foundation until 1914 is shown in the following table:

TABLE III. — *Development of the "Mutuelle chevaline suisse" from* 1901 *to* 1914.

Year	Number of policies	Number of horses insured	Value insured	Claims paid
			Francs	Francs
1901	211	415	334,400	3,250.00
1902	360	796	649,875	12,021.25
1903	687	1,470	1,221,905	28,883.50
1904	1,116	2,297	1,931,545	54,840.25
1905	1,535	2,935	2,535,400	70,123.75
1906	1,977	3,481	3,177,295	79,457.50
1907	2,272	3,843	3,492,050	87.959.85
1908	2,801	4,460	4,233,405	110,760.00
1909	3,275	5,295	4,910,492	129,454.50
1910	3,906	6,302	5,911,055	159,002.50
1911	4,564	6,903	6,687,175	191,150.00
1912	4,723	7,277	7,138,880	201,082.50
1913	4,880	7,644	7,505,335	225,105.00
1914	5,020	7,215	7,075,835	230,274.65

In 1914, notwithstanding the addition of about 140 new members, the number of animal insured diminished by 429 and the total value insured by 429,500 francs. This diminution is accounted for by the fact of several members owners of a certain number of horses which were requisitioned by the military authorities, having sent in their resignation, preferring to suffer the risks themselves during the continuance of the requisitions. But the report adds that this movement was not successful, for many animals died or had to be slaughtered, the time for obtaining compensation having expired. The diminution in also caused by the prohibition of any importation of animals and therefore by the consequent advance in the price of horses by the many deaths among those requisitioned whose owners preferred not to replace them before the termination of the war.

An exceptional number of suspended policies was noted in 1914 because the members had no longer the animals to insure. Art. 20 in the rules of policies clearly provides for such eventuality which must occur on a large scale in all the societies of belligerent states; it declares that with the consent of the Committee of Management, the policy may be suspended if the member does not at the time possess the animal. The suspension ceases when the member inform the Committee of Management of the circunstance and the insurance is renewed as before, provided of course that the risk is unchanged. But the member loses his right to compensation if the disease or accident that caused the death occurred when the member had not the use of the animal or if it was employed in work other than that mentioned in the policy.

The Society does not insure risks caused by war or conflagration, nor risks in horse-racing, except by special agreement with the Committee of Management.

For the following losses no compensation can be claimed:

(1) losses caused by internal disease which supervened within fifteen days from the date when the contract came into force. In this case the contract is void till the cure is duly certified by the veterinary;

(2) losses resulting from glanders or farcy appearing within fifty days from the date when the policy came into force;

(3) losses with regard to animal which before the contract was made had undergone an operation of which the company was not informed;

(4) losses caused by ill-treatment or neglect.

These exclusions from the benefits of insurance are justified by the fact that special risks of mortality in live-stock depend partly on the insured person; by the necessity of vigorous repression of fraud and of localising the risks, and lastly by the importance of encouraging hygienic methods in the stables and the prevention of disease.

Animals may be insured from the age of three months to twenty years; but when an animal has not been insured before its fifteenth year, the Committee of Management alone can permit its insurance above the age of twenty under special conditions. But from the age of twelve, for every animal there is an annual compulsory abatement of 10 per cent. of the amount for which it was insured at that age.

* * *

In 1914 the company paid 337 claim of which 112 were for cases of the death or accident, and 225 for cases of slaughter ordered by a competent authority, by a veterinary with a diploma, or by the Committee of Management, in consequence of disease or accident having unfitted the animal for any kind of use.

The causes of loss or reason for slaughtering may be thus classified: 66 cases of pulmonary emphysema, 16 of other disease of the respiratory organs, 7 of heart disease, 21 of anæmia, 66 of colic, 11 of other diseases of the digestive organs, 13 of incurable obstinacy, 6 of tetanus, 23 of hœmoglobinuria, 57 of chronic lameness, 17 of fracture, and 34 various accidents.

In the above quoted report it is stated that the Committee of Management believed that the mobilisation of the army would diminish the number of losses; but this expectation has not been realised, and it has also been found that the compensation guaranteed by the company is less than that granted by the Government. Art. 29 of the conditions of the policies declares that the compensation for losses of insured animals, paid by the State, by communes or third parties under any denomination, must be collected directly by the members, who must immediately give notice to the company. The sums thus collected will be deducted from the amount guaranteed by the company because insurance should merely compensate for loss, and should never be a source of gain to the insured party. Therefore in the year under consideration the company confined itself to paying many insured persons the difference between three-fourths of the value insured and the compensation paid by the federal Government.

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With regard to an *estimate of the losses*, it must be observed that in case of disease or accident to the insured animal, the member must at once give notice to the company by registered letter. He must also, without delay, call a veterinary surgeon holding a diploma, and follow his instructions. The veterinary surgeon must report to the society.

The authorisation or order to slaughter an insured animal or sell it to a butcher is given only by the society's Committee of Management on the report of the veterinary; but in urgent case the veterinary may, in virtue of his office, direct the slaughter informing the Committee by telegraph. The member who fraudulenty or wilfully neglects these directions loses every right.

In case of the the death of an insured animal the member must immediately give notice by registered letter to the Committee of Management, within 24 hours at the latest: if he could not inform the Committee of the disease previously or if the animal must be buried without delay, the communication must be made by telegraph.

The carcass of the animal must be kept till the veterinary surgeon appointed by the Committee, can certify the death and its cause, and make a post-mortem examination. The members is requested to be present when the estimate is made, and the report drawn up, signed by the veterinary and the member. Should a dispute arise, the decision must be referred to another veterinary surgeon holding a diploma. The reports of veterinary experts are submitted to the Committee of Management, which must within a month fix the amount of compensation.

From these provisions thus briefly enumerated, it will be seen that the *Mutuelle chevaline suisse* seeks to give continual encouragement to preventive hygiene and to diminish losses from disease, while at the same time protecting as equitably as possible the individual rights of members.

The cost of valuation is divided equally between the members and the company, that of care and of slaughter, is paid by the members ; in 1914 the cost of valuation by a veterinary was fixed at 3 francs for one horse, 5 francs for two horses, one franc for every additional animal, up to 20 francs.

We have already stated that the company paid compensation in 1914 for three-fourths of the value insured, and that in order to interest the members in keeping their animals in good condition, a quarter of the value insured is placed to their account.

The carcass of the dead or slaughtered animal belongs to the insured party who must however pay to the company its value as fixed by the veterinary called to certify the loss.

Lastly, in the report, of th Committee of Management of the society, it is stated that horses not requisitioned by the military authorities were often overworked, especially in the country districts where there was a deficiency of draught animals ; horses were often lent and many died of excessive fatigue. It was also ascertained that many members tempted by the high war prices, preferred to sell their oats as a speculation, rather than keep them to feed their horses. Members were therefore warned to take good care of their animals, and to feed them well, for the Committee of Management would refuse to pay compensation for a loss caused by want of care or food, or by excessive w ork.

Art. 30 of the policy declares explicitly that any fraud or serious offence committed by a member exonerated the company from all obligation in case of loss, not excluding the possibility of prosecution, while the members obligations towards the company remain unchanged. If at the time of drawing up the contract the member have purposely misled the Committee with regard to the risks of the animals to be insured, the policy may be determined by the company within four weeks after the discovery of the fraud. Lastly, a member loses all his rights should be through a serious offence, cause the death of any one of his animals, or neglect to give information of disease or vice which might increase the risk named in the policy.

Connivance in fraud by another person with a member is considered the same as a fraud committed by the member himself ; .this applies especially to connivance in fraud by persons belonging to the family of the member or by those in his employment.

TABLE IV. — *Financial Year* 1914 *of the "Mutuelle chevaline suisse."*

	(*a*) Profit and loss	(*b*) Balance	
	Frs.	Frs.	
Receipts.			*Assets.*
Net premiums paid in	237,820.25		
Entrance fees	3,056.56	16,317.50	Securities in bonds and deposit with the Federal Government.
Interest	776.45	7,000.00	Bonds guaranteed.
Reserve for claims under consideration on the 31st December, 1914	11,000.00	4,319.75	Various debtors,
		5,583.25	Furniture and cost of fitting up new offices.
Total	252,653.20	10,034.00	In banks.
		1,770.65	Cash in hand.
Expenses.			
Compensation paid after deducting the profits of the carcass	190,344.85	45,025.15	Total.
General expenses, wages, rent, printing publishing, fees, etc.	24,448.20		
Salaries to agents and veterinary surgeons' fees	20,655.65		*Liabilities.*
Payment for furniture and cost of filling up new offices	1,266.30		
Bad debts, difference in value of bonds, and miscellaneous	1,296.85	15,000.00	Guarantee fund on 31st Dec. 1914.
		12,782.60	Reserve.
Reserve for Claims under Consideration on 31st Dec. 1914 L. 11,000		4,242.55	Various creditors.
Reserve for risks to requisitioned horses » 2,000	13,000.00		Reserve for ontstanding risks 31st Dec. 1914, 11,000 fr.
Net profit for the year paid to the reserve fund	1,641.35	13,000.00	For risks to horses requisitioned.
Total	252,653.20	45,025.15	Total.

MISCELLANEOUS INFORMATION RELATING TO INSURANCE AND THRIFT IN VARIOUS COUNTRIES.

CANADA.

HAIL INSURANCE IN SASKATCHEWAN. — *The Public Service Monthly*, Regina, No. 2, September, 1915.

In a previous issue (1) we dealt with the work of the Saskatchewan Hail Insurance Commission during the first two years of its existence, — the period covered ending February 28th, 1915. A note in the *Public Service Monthly* (Regina : September, 1915) gives us some information with regard to damage by hail in the Province in the summer of 1915.

Up to the middle of July the loss due to damage to crops by hail was less than the losses up to the same date in 1914. The storms up to that time had been confined to small areas in each case. On July 22nd, however, a widespread storm occurred which was really disastrous in some localities. The storm followed almost exactly the same track as one of the most serious storms of 1914, and some farmers suffered the disheartening experience of losing their entire crops two years in succession. Almost the whole area affected had protection under the Municipal Insurance scheme, though, unfortunately, two districts — Balcarres and Abernethy — where the damage done was very severe, were not included. Later on in the year an area lying north-east of Moose Jaw suffered somewhat heavily from a local storm. On the whole it is estimated that the losses in 1915 will prove to have been heavier than in 1914, when, however, losses were exceptionally light.

After the great storm of July 22nd, twenty-five inspectors were engaged in adjusting losses on the spot, and in September, 1915, fifteen inspectors were still at work inspecting damage in various parts of the Province. Every effort was being made to perfect the system of inspection. Wherever possible the inspector visited the damaged crop in company with the farmer, and endeavoured, during his visit, to secure the assent of the latter to the award proposed. In 1915 the minimum amount of damage for which compensation would be claimed was made 5 per cent. instead of 10 per cent. as hitherto. An additional right of appeal was also granted to the farmer dissatisfied with the award. After reinspection, which in previous years had been final, the farmer, if still dissatisfied, may have the matter settled by arbitration ; but it is anticipated that only an insignificant number of cases will be still unsettled after reinspection.

The number of municipalities under the Act in 1915 was 127, and in September a number of municipalities still outside the scheme had already intimated their desire to come under the Act with the year beginning March 1st, 1916.

(1) See the *Bulletin*, August, 1913, at p. 74.

SPAIN.

A NEW MUTUAL LIVE-STOCK INSURANCE SOCIETY. — *La Industria Pecuaria*, Madrid, No. 494, October 1st., 1915.

Up to now agricultural insurance in Spain has not been highly developed. For the most part it is carried on by private companies. It is true, especially in regard to live-stock insurance, that there is a fairly large number of mutual societies, especially in the east and north of the country, but they are almost all rather primitive in character ; there are very few, in fact, which have adopted the principles and the modern forms of mutual insurance.

This situation gives special importance to the fact that the Aragon Regional Committee of the General Stock-owners' Association has organised, apparently with success, the mutual insurance of working animals, through the medium of a section of the agricultural and stock-raising syndicate known as the *Casa de Ganaderos de Zaragoza*.

This new mutual insurance society is organised, in its general lines, as follows :

The object of the society is partially to compensate the members for the robbery or theft of a working animal, its death or complete inability to work resulting from accident or illness, or its compulsory slaughter. By complete inability to work is understood the loss or incurable fracture of one or more legs. Compensation will only be given for animals slaughtered in accordance with legal requirements if there is an officially established fund out of which the association can obtain what it pays to the member.

To be admitted as a member of the association it is necessary (*a*) to be a member of the *Casa de ganaderos de Zaragoza* ; (*b*) to live in the neighbourhood of Saragossa or in such adjacent districts as may be determined by the General Meeting ; (*c*), to have no horses insured with any other society — if the applicant has any horses so insured any compensation which may be paid by the other society shall be handed over to the mutual society ; (*d*) to guarantee to provide veterinary attendance for the animals insured ; (*e*) to agree to whatever method of identification the mutual society may propose ; (*f*) to pay in advance for each animal insured a contribution so calculated as to cover the risks of accidents and the management expenses and to allow of the formation of a reserve fund.

With this society all classes of working animals may be insured — horses, mules, asses or oxen. To be insured, however, an animal must satisfy the following conditions : it must be more than one year old and fit for work, be passed by a veterinary inspector and be submitted to his inspection whenever the Committee so instructs. Valuations and inspections may be made at the residence of the member if he so desire, but in that case the inspection fees will be charged to him.

The value of the animals insured will be fixed according to the declaration of the owner, if that is accepted by the Committee on the advice of their veterinary inspector. All the estimates of value will be presented annually to the Committee, which will revise them and may decide to

modify them. If the member is not satisfied with the revision, he may appeal to the General Meeting.

The premiums payable by the members will be of two kinds —ordinary and cumulative. The ordinary premium will cover insurance against accidents, hydrophobia, symptomatic anthrax, glanders, robbery and theft. In the first year the ordinary premium will be 2 % of the total value of the animal insured.

By the cumulative premium the animal will be insured not only against the risks covered by the ordinary premium, but also against illness. In fixing the cumulative premiums, which are to be added to the normal premium, account will be taken of the age of the animal and the mortality rates of the class of animal to which it belongs.

For mules and asses the cumulative premium will be, for the first year: if one to four years old, 2 % of the estimated total value of the animal insured; if four to eight years old, 1 ½ %; if eight to twelve years old, 3 %; if over twelve years old, but still fit for work, 4 %. In the case of horses, on account of the higher mortality rates, the cumulative premiums are about 5 % higher then those for mules and asses.

Oxen are not insured against illness.

For breeding animals, the premiums mentioned will be increased by 10 % to cover the special risks of gestation and parturition. No indemnity will be paid in the case of death caused by dourine.

All these premiums, ordinary or cumulative, may be modified each year by the General Meeting.

When an accident or other loss occurs, after it has been verified and the claim passed by the Committee within a period not exceeding 15 days, the member making the claim will be paid 75 % of the assured value. The payment of the compensation does not prevent the society from inquiring into the causes of the accident or loss, with the aid of the person who has suffered thereby, and, if need be, it may take whatever legal action it has a right to take against the member or against third parties who may be responsible for the accident or loss, or may share in the compensation paid to the owner of the animal.

In case of the loss of the animal by accident, robbery or theft, or compulsory slaughtering, the person who has suffered thereby, after having recovered the sum assured, shall transfer to the association all his rights to claim compensation; if, however, the society obtains a sum larger than that which it had paid to the member, it will pay him the balance, after deducting the expenses incurred.

The insurance begins from the date when the policy is signed. The premiums are annual, as we have said, and they are payable in the first three months of the breeding year, that is, from July to September.

For delay in the payment of the premiums or refusal to take the preventive measures which the Committee may prescribe, the member forfeits all right to compensation. Nor will compensation be paid for the death, loss or inability to work of an insured animal which may result from war, revolution, riots, or requisition, or from preventive inoculation carried out

without the authorisation of the Committee or from surgical operations which were not urgently required and had not been so authorised.

The reserve fund will be formed by the balance available at the end of the year after all compensation has been paid and the expenses of management covered. The members who voluntarily withdraw from the society, having complied in all respects with the rules, will have the right to the repayment of 75 % of the sum due to them out of this surplus, proportionately to the extent to which their premiums have served to build it up.

In the event of the dissolution of the society, the rules lay down that, if the liabilities exceed the assets, the balance shall be made good by the members, but that it there is a credit balance, 75 % of it shall be paid to the members in the proportions indicated, and the remaining 25 % shall be paid to the *Casa de ganaderos de Zaragoza*, to be utilised for the promotion of similar mutual insurance societies.

UNITED STATES.

STATE HAIL INSURANCE IN NORTH DAKOTA. — Biennial Reports of the Hail Commissioner for the Terms ending December 31st., 1912, and December 31st., 1914. Bismarck, 1912 and Devil's Lake, 1914.

The State of North Dakota in 1914 initiated a scheme for the provision of hail insurance to farmers, the history of which may be read in the First and Second Biennial Reports of the Hail Commissioner. Apparently the scheme has met with only qualified success, and it is admittedly tentative. Each year's working must be regarded as an experiment made with the object of arriving at a sound actuarial basis for voluntary hail insurance under the conditions subsisting in North Dakota, and must be judged accordingly. The Law of 1911 (Chapter 23, Session Laws of 1911) under which the scheme started, has already been amended by Chapter 192, Laws of 1913, and proposals for further legislation are already under consideration.

During 1911 and 1912 the state accepted insurance of 160 acres of grain of any kind — wheat, oats, barley, rye, etc. — for $32, fixing the maximum compensation payable in case of loss at $1,280. The commercial companies were then charging a minimum of $65 for insuring the same area, and fixed the maximum amount payable at $1,000. In 1911, the number of policies written with the state was 1,011 and the amount collected in premiums was $26,109. When the working expenses of the scheme had been met and a certain sum set aside as a contingency fund, the balance of $21,188 was distributed among the policy holders, whose claims were paid at the rate of 70 cents in the dollar. In 1912, the number of policies taken out with the state increased to 2,505, and the total amount received in premiums to $64,850.

The amount paid in compensation for losses incurred during the year was $57,936, claims being paid at the rate of 55 cents in the dollar. In 1912 the damage done by hail in the state was unprecedentedly heavy and, as the state charged a uniform rate for the whole of North Dakota and placed no limitation on the amount of insurance it would accept in any

section or township, it was particularly hard hit. In the same year there were seven commercial companies doing hail insurance business in the state and the average amount received in premiums per company for the year was $152,000, the premiums received by the state amounting, as has been stated, to $64,840. The commercial companies, it may be mentioned, limit the amount of the risks which they will accept for insurance in any section or township and charge considerably higher premiums in the western than in the eastern townships of the state — 75 cents per acre as against 65 cents per acre.

The law was amended in 1913 in time for the insurance business of that year to be regulated by the amended law. The results for 1913 and 1914, however, are not encouraging. The number of policies dropped to 773 in the former year and to 761 in the latter, and, though claims in 1913 were settled at the rate of 88 cents in the dollar, the rate dropped again in 1914 to 65 cents in the dollar.

Two important changes were introduced in the scheme by the law of 1913. The rate for insurance was increased from 20 to 30 cents per acre and an Official Adjuster was appointed in each county. The Hail Commissioner in his last report says: —" Just what effect the increase of rate had is a matter of speculation, but the fact remains that during the first two years under the 20-cents-an-acre rate the premium income was $90,945, while during the succeeding two years under the 30-cents-an-acre rate the income was only $54,986. It is reasonable to assume that the marked falling off in business was due in part to the fact that the 1911 losses were settled on the basis of 70 cents on the dollar. This showing did not make for confidence in the scheme of state hail insurance. However, the fact that the stock companies also wrote a greatly reduced volume of hail business in this state in 1913 should be taken into account.

While the present method of adjustment is undoubtedly an improvement upon the original plan, yet I am disposed to believe that a still better method would be to authorize the Department to engage the services of one or two experienced adjusters who would operate in all sections of the state. It is believed this plan would result in more accurate adjustments at reduced cost."

In a report which he made to the Governor of the State at the end of 1913 the Hail Commissioner admits that his enthusiasm for the scheme " has been somewhat dulled ;" but he concludes, nevertheless, that " state hail insurance is entirely feasible, provided a large number of policies be issued and the risks widely distributed over the state, "—a line of argument which runs perilously close to *petitio principii*.

ITALY.

INSURANCE AND THRIFT IN 1914. — BACHI (Ricardo): L'Italia Economica nel 1914. Annuario della vita commerciale, industriale, agraria, bancaria, finanziaria e della politica economica. 7th Year. Supplement to the issue VI-VII of *La Riforma Sociale*. Turin: Società Tipografica-editrice Nazionale, 1915.

An examination of the well-known Year Book *L'Italia Economica* shows how the outbreak of the European war has in many ways affected

every branch of insurance, so that the half-year immediately preceding and that following the outbreak of war present very different features.

Confining ourselves to certain branches we note that the National Institute of Agrarian Mutual Insurance continues its propaganda, devoting itself in particular to the formation of mutual live-stock insurance societies and to grouping these in district federations.

Offices for the co-ordination of agricultural mutual insurance are already working in Turin, Florence, Reggio Calabria, Genoa, Mantua, Rome and Palermo (1).

At the Milan meeting of the National Congress of Veterinary Surgeons resolutions were passed calling for a wider diffusion among small cultivators of the advantages of mutual insurance in combating diseases of animals, and for the drafting of a bill for the protection of small local mutual insurance societies.

With regard to live-stock insurance, the establishment of an autonomous provincial reinsurance institute based on mutual principles is due to the initiative of the Provincial Administration of Alessandria. Its object is reinsurance against the loss of cattle through disease or accident. Every local society must pay to the Institute 45 per cent. of the minimum premium, fixed at 1.25 per cent. of the insured value.

With regard to hail insurance, Sig. Giordano's bill, introduced in the Chamber on the 21st February, proposed the formation of provincial mutual societies for the insurance of specified agricultural products against damage by hail.

Insurance would be undertaken on a favourable vote of two-thirds of the Provincial Council which would also be empowered to fix the amount of the contributions at a percentage of the value of the insured produce and according to the nature of the crop. This bill has not yet been discussed by the Chamber.

With regard to school mutual insurance (2) a slow but continual advance is to be recorded in the formation of new mutual insurance societies and in the extension of those already existing, especially in North Italy. At the end of 1914, 52 mutual societies with 47,900 members had applied for and obtained legal recognition, while mutual societies not legally recognised and the local sections of federations of school mutual insurance societies, numbered 830 with about 80,000 members. The balance sheet of 1913 of the National Bank of Thrift was the first to show particulars of the special fund for " School Mutual Insurance. "

On the 31st December, 1913, there were 30,301 members belonging to 28 school mutual societies with 161,982 francs paid up and 45,351.50 francs in contributions paid into the Bank. On the same date the fund amounted to 213,103.50 francs. During 1914 the number of school mutual insurance societies affiliated to the Bank continued to increase. Thus the School Mutual Insurance Society of Turin registered 3,063 new members,

(1) For their work and aims see the *Bulletin* of September, 1915, p. 47 seq.

(2) See our article *School and Forest Mutual Societies in Italy* in the *Bulletin*, September, 1915, p. 37.

that of Florence 2,995, and so on. Lastly, it must be observed that the Milan School Mutual Insurance Society undertook to concentrate and give direction to the efforts of mutual insurance societies to supplement sickness benefits and old age pensions by the establishment of other auxiliary institutions likely to prove popular and to attract a larger number of supporters. Thus it established two convalescent homes for members of the middle class, an employment agency to assist its members in finding employment suited to their capacities when they have completed their elementary education, and an agency for the joint purchase of text-books, stationery, etc.

As regards social insurance the effect of the war has been to delay or suspend the promotion of further State schemes. It has been so with the long promised bills *for the amendment of the law on accidents in industry* (31st January, 1904, No. 51) *and for the extension of compulsory accident insurance to agriculture.*

But the serious failure of a limited liability insurance company, *La Lombellina*, is a further proof of the desirability and even urgency of a reform of the existing law. The Government has confined its activity to the work of organising the National Accidents Banks which is establishing compartmental and secondary branches in order to decentralise its labours. In order to facilitate insurance with the Bank against accidents in agricultural labour, a Royal Decree of the 14th May, 1914, as an experimental measure, approved the tariffs of premiums of insurance against accidents in agricultural work not covered by the above mentioned law of 1904 (1), and the schedule of rates of compensation.

The new policy extends to all agricultural labour not subject to compulsory insurance, thus including all labour directly connected with the cultivation of the land, as well as all labour accessory thereto such as harvesting, the handling and transport of produce, cattle-rearing, the custody of farms and of produce, etc. It aims in particular at the precise definition of risk, at the payment of fixed sums in compensation at moderate rates, and the determination of premium rates in proportion to the area of holdings and the various types of farming.

It is also worthy of note that the Agrarian Society of Rome (*Comizio Agrario di Roma*) has been the promoter in the formation of a new private mutual accident insurance society for agricultural labourers.

In the course of the year the first results of the work of the *National Maternity Bank* were made public. This Bank forms an autonomous section of the National Bank of Thrift and is intended to assist working women on the occurrence of births or abortions. The benefit is fixed at 40 francs of which 30 are paid from the funds of the Bank and 10 by the State as a grant-in-aid. Registration in this bank is compulsory for all working women who are under the provisions of the law regulating the conditions of labour of women and children. The annual contribution is fixed at one franc for those from 15 to 20 years of age, and two francs for those

(1) See on this subject our article *Proposal For a Bill to Extend Compulsory Insurance to accidents in Agricultural Labour*, in the *Review*, January, 1916.

from 20 to 50. Half the sum is due from the employer and half from the worker, but the whole must be paid by the employer who may deduct the amount from the woman's wages. The number of firms insured was 11,229 on the 1st September, 1913, and in the following half-year (October, 1913 to March, 1914) it diminished to 9,680 and the number of women paying into the bank diminished from 481,132 to 426,872. The causes of this were the delay of many firms in making their half-yearly payment, and the greater number of seasonal industries carried on from April to September. The financial year 1913-14 closed with a deficit of 113,875 francs.

Consideration of the question of *working men's pensions* was necessarily postponed owing to the war.

The permanent propaganda committee for *compulsory insurance against sickness, disablement and old age* which has been formed in Rome decided to undertake an inquiry into the organisation of old age and sickness insurance in foreign countries, and into the question of bringing the reform of compulsory sickness insurance into line with the present state of sanitary and hospital assistance, but the result of the inquiry had not been published.

Lastly, with regard to unemployment insurance, the Superior Council of Thrift, upon the motion of Prof. Gobbi passed the resolutions which are dealt with below.

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RESOLUTIONS OF THE COUNCIL OF TRIFT AND SOCIAL INSURANCE UPON THE PROBLEM OF UNEMPLOYMENT.

Among the subjects discusssed by the Council of Thrift and Social Insurance (1) in the session of 1914 one of the most important was that of insurance against involuntary unemployment.

The subject was introduced by Professor Ulysses Gobbi (2) who having explained the problem in its full extent, and demonstrated that involun-

(1) The Council of Thrift and Social Insurance in Italy is the highest public body with consultative functions in the matter of thrift. By Royal Decree of 20th October, 1911, No. 1204, it must give its opinion in all cases if requested to do so under the laws and rules in force. The Ministry of Agriculture may in addition submit to it for examination all subjects relative to thrift and workmen's insurance. It is composed of fourteen members appointed by Royal Decree and nominated by the Ministry of Agriculture, Industry and Commerce; of one representative from the Superior Council of Labour, another from that of Public Assistance and Benefit, and a third from the Society for Mutual Aid; one representative of ordinary savings-banks, and one of the national insurance companies. The Directors-General of Credit and Thrift, of Statistics and Labour, and the Director-General of the Institutions for Thrift of the Ministry of the Treasury are members *ex officio*. The Minister of Agriculture may besides from time to time invite officials and private persons, specially competent upon particular questions, to take part in the discussions of the Council in a consultative capacity. The Council meets in ordinary session at least once a year, and in extraordinary session as often as the Ministry considers necessary. For each session the Minister appoints President and Vice-President, but should the Minister himself and the Under-Secretary of State be present, they assume these offices. Decisions are by a majority vote, and the President has a casting vote.

(2) See the clear and exhaustive report of Prof. Ulysses Gobbi in the *Annali del Credito e della Previdenza* (Series II. Vol. 7, 1915) published by the Ministry of Agriculture. The subject of involuntary unemployment is closely studied as to its causes, the means taken to prevent it, and to avoid its consequences, and in particular it is demonstrated that unemployment is a risk suitable for insurance.

Among Italian works on this subject we may mention in particular that of Livio Mar-

tary unemployment is a subject for insurance, propounded the question if this should be voluntary or obligatory; then, having discussed the Bill brought forward by the Luzzatti Ministry in 1910, and passed by the Chamber, for subsidising those institutions which propose insurance against enforced unemployment (1), he concluded that it was necessary to proceed gradually in enforcing the obligation of insurance on some trades under free forms of thrift which have received grants. He also pointed out the need for provisions of a preliminary character, such as the institution of Labour Exchanges, and the reform of the law for the legal recognition of mutual aid societies. Lastly, he referred to some fundamental rules for the distribution of grants to the unemployed, concluding with the following resolutions approved by the Council: —

(1) Insurance against unemployment should be made compulsory to guarantee a minimum of compensation to wage-earners in case of temporary disablement, confinement, permanent infirmity, involuntary unemployment, and to widows and orphans in case of death, for the payment of which, labourers, employers, the State, communes, and charitable institutions should unite, without, however, necessarily calling upon all these as contributors in every branch of insurance.

(2) This general plan of compulsory insurance should be brought into use gradually so as to secure co-ordination among the various branches.

(3) While waiting until compulsory insurance against unemployment shall be introduced in Italy, the State should make grants to those legally recognised trades-unions which insure their members against unemployment.

(4) This scheme should be accompanied by that for Labour Exchanges, which is already under consideration by the Superior Labour Council.

(5) It should also be accompanied by a law for the legal recognition of mutual aid societies according to Chap. I of the plan already prepared by the Council of Thrift.

(6) The regulations already in use by the Humanitarian Society (2) ought generally to be observed in assigning grants.

After the outbreak of the war it was impossible to carry out these provisions, but at the same time the necesssity for them was seriously felt. To remedy the deficiency the Council of Thrift in April, 1915 expressed their views on the subject, and passed resolutions in favour of: —

CHETTI — *Sistemi di difesa contro la disoccupazione* with a *Note sulla Statistica della disoccupazione, di* ALBERTO CARONCINI (Milano, 1908), and that of ARNALDO AGNELLI *Il Problema economico della disoccupazione operaia* (Milano, 1909).

(1) This bill was introduced in the Chamber by the Ministers Luzzatti, Raineri and Tedesco on the 1 th June, 1910 It proposed that, beginning with the financial year 1910-1911, an appropriation of 100,000 francs should appear each year in the budget of the Ministry of Agriculture, to be used to make grants to those trade associations, whether with legal recognition or without, based either wholly or in part on the principle of thrift, which assist able-bodied working men involuntarily unemployed who for a given period have been registered in the association. Rules were to be made to establish the conditions under which such associations would be eligible for a grant from the State, and also for the appropriation and distribution of the above mentioned grant. Though this bill was passed on the 6th July, 1910, it was opposed by the Central Office of the Senate, the report of which, drawn up by the Senator E. Conti appeared on the 16th. January, 1911.

(2) For the regulation and working of the Bank for Assistance to the Unemployed of the " Humanitarian Society " of Milan, see the *Bulletin* July 1914, p. 53 et seq.

(1) Grants from the State to trades-unions which, even if not legally recognised, insure their members against unemployment, supplementing the system of grants by establishing Labour Exchanges and making use those already in existence;

(2) Grants to trade-unions in general which insure artisans, labourers and employees of private firms against unemployment, or make grants to them from local banks established for this object, but aiding the unemployed member through the association to which he belongs, always with the help of Labour Exchanges;

(3) Co-ordination among institutions for assisting the unemployed in order to control cases of fictitious unemployment, the misrepresentation of family circumstances, and the claiming of too many grants. (1)

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INSURANCE AGAINST INDUSTRIAL ACCIDENTS AND THE RISKS OF WAR. — *La Gazzetta Ufficiale del Regno d'Italia.* No. 275. Rome, 10th November, 1915.

The Minister of Agriculture, Industry and Commerce had already given his sanction to the obligation for all insurance associations in Italy to guarantee workmen against the risks to which they might be liable in the course of their work because of operations of war.

But as the risk thus assumed by the societies might in the progress of the war far exceed the limits foreseen at the period of the drawing-up of the tariffs a Vice-regal Decree of 31st Oct., 1915, authorised such institutions to add an extra premium to meet the increase of risk. This Decree declares that all heads or managers of enterprises, industries and constructions subject to the Law of 1st January, 1904, No. 51 (for obligatory insurance of workmen against accidents) are required from 1st Sept. 1915, and during the whole period of the present war to pay for the workmen by them employed the extra premium for the risks of war, to the amount fixed by the respective insurance companies, within the utmost limits fixed by the Ministry of Agriculture, Industry and Commerce for special districts and for various kinds of undertaking. For this purpose the various insurance companies, must within ten days from the coming into force of the new Decree lay before the Minister personally the special conditions and the highest tariffs for the extra war-premium. The Minister on his part, may at any time, on his own initiative and by request of the society modify these conditions and limits. The National Accidents Bank is also authorised to accept, by way of reinsurance from insurance societies or private companies, from private or consortial banks or syndicates of mutual insurance, a quota of the risks assumed by these institutions.

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THE MILAN MUNICIPAL COUNCIL AND THE QUESTION OF THRIFT. — *Il Sole*, Milan, No. 239. October 7th, 1915.

An important discussion took place last October in the Communal Council of Milan on the subject of *Communal provisions for the assistance of as-*

(1) In connection with these resolutions of the Council of Thrift in the session of 1915, see the article by Prof. Gobbi: *War and Labour Insurance* in the *Bulletin of Insurance*, Turin, No. 21, 1-15 November, 1915.

sociative thrift. As the subject is of great interest, and the provisions adopted by the Municipality of Milan are worthy of attention, we give the following brief particulars. (1)

Observations of the Junta on the subject must first be given.

Unemployment, sickness, disablement, and old age for independent workpeople who have nothing but their weekly wages to live upon, are a danger much more serious and to be dreaded than for the employees of public bodies or for the middle and wealthier classes. Thrift is therefore the bounden duty of the working classes, but in Italy it is checked by the natural tendency to improvidence which is encouraged by the climate and justified by the low rate of wages. The remedies would therefore be to make associative thrift compulsory, and at the same time to raise the wages.

The first may be achieved by law, the second by a general improvement in the economic state of the market.

In the meantime, till these conditions can be realised, the communes may work in their own way for associative thrift.

It is clear that if associative thrift be extended as widely as possible with regard to unemployment, sickness, disablement, and old age, a point will be reached at which charity for these fundamental forms of want will no longer be needed.

For these reasons that which has hitherto not been done ought to be done, namely, to promote encourage, and aid associative thrift, especially among the younger generation, with the certainty that money thus employed will not be required for future alms-giving.

The way in which the commune may give encouragement is by assisting individual citizens in their efforts to provide against future dangers.

Such assistance may be given either to the entrance fee or to the grant which is distributed, provided it be always less than the fraction of quota paid by the member, or than the fraction of the grant received by him, so that its character of stimulus and reward should be maintained, and that it should be an encouragement to united control by the members over statements of unemployment or illness."

It was therefore proposed that besides the 60,000 francs appropiated in the estimates for 1915, the Commune should provide in future estimates for the completion of associative thrift in the following ways:

Against Unemployment.—Many labour leagues in Milan make a special point of giving grants in case of unemployment. Forty-six of their number, belonging to the Bank of the Humanitarian League for aid in case of unemployment, comprised 12,823 members in 1913, of whom 1,618 received grants on account of unemployment, amounting in all to 111,860 fr. of which 87,779 were paid from the quotas of the members themselves, and 24,081 francs (equal to 21.53 % of the total grant made) by the Humanitarian Bank.

The Commune sets apart 20,000 frs. to complete the grants for involuntary unemployment to workmen who belong to associations in Milan, managed only by workmen and formed exclusively of men who all exercise the same trade or profession. These associations, besides providing help in

(1) From *Il Sole*, a Milan daily paper No. 239. 7th Oct. 1915.

cases of unemployment aim at the improvement of conditions of thrift or unemployment.

Against Sickness. In Milan there are trade or general mutual aid societies which comprise about 60,000 members, of whom 30,000 are working people. Now the Commune wishes to incite the new working generation to make provision for illness, and has therefore for this first year granted 20,000 frs. to assist monthly quotas not lower than 1 fr. 20 with an extra premium of 30 centimes per month, and for a period of three solar years, if the associations continue in a position to give a grant of at least 1 franc daily to men and 75 centimes to women for a period nor less than three months in those cases of illness or accident during work in which insurance was not compulsory. To receive this grant those citizens born in Milan or who have lived five years there will have the preference. With a sum of 20,000 frs., 5,555 new members might be registered in the mutual insurance against sickness, and as the agreement to complete the quota is triennial, the communal burden will be 40,000 frs. in the second year and 60,000 frs in the third, to remain fixed at this sum in the succeeding years, while increasing the number of members to 16,665.

Against Disablement and Old Age. The natural means of provision against disablement and old age among working men is the National Bank of Thrift. Those who should register themselves in this bank are (*a*) those young people who have passed through technical schools belonging to societies or public bodies, and evening classes of the higher communal schools; (*b*) working men and women belonging to the so-called "resistance" societies, not above 35 years of age ; (*c*) poor blind persons born and resident in Milan ; (*d*) pupils belonging to families in narrow circumstances, having passed through the sixth elementary class, and not continuing their studies, but are employed in workshops or in trade, and have been members of the School Mutual Insurance Society.

Where necessary 20,000 frs. will be set apart to enable 6,666 citizens who will pay an equal sum to become members.

This sum will be doubled in the second year and will amount to 60,000 frs. in the third year, thus enabling about 20,000 young persons to become members.

The Communal Council, taking into consideration the above mentioned report of the Junta, decided: (*a*) to sanction the agreement of the 27th Sept. 1915, with the *Humanitarian Society* according to which the Commune should take part in the Bank for aid in case of unemployment with an annual sum of 15,000 frs., besides entrusting it with the distribution of another 5,000 frs. per annum, until the 31st Dec. 1919, except in case of renewal ; (*b*) to accept the proposal of provision for sickness among the working classes, for three years, appropriating to this purpose 40,000 frs. from the balance of 1916, and 60,000 from that of 1917, besides that previously arranged for 1915 ; (*c*) to accept also the proposal of provision against disablement and old age among the working classes, with the relative sums of 40,000 frs. for 1916 and 60,000 frs for 1917, besides those already set apart for 1915.

Part III: Credit

DUTCH EAST INDIES.

THE EVOLUTION OF POPULAR CREDIT.

OFFICIAL SOURCES :

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OVERZICHT VAN HET BEDRIJF DER SPAAR- EN CREDIETINSTELLINGEN VAN PHILANTROPISCHEN AARD TEN BEHOEVE VAN DE INLANDSCHE BEVOLKING OP JAVA IN HET IN 1904 AFGELOOPEN BOEKJAAR (Z. G. AFDEELINGSBANKEN EN ANDERE) (*Statement of the Working of the Savings and Credit Institutions of a Philanthropic Character for the Benefit of the Native Population of Java during the Business Year* 1904 : *Departmental and other Banks*). Batavia, 1906.

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WEZEN IN NEDERLANDSCH-INDIË (*Information regarding the Departmental Banks. Practical Hints for the use of these Popular Credit Institutions, compiled by the Popular Credit Service of the Dutch East Indies*). Batavia, 1912.

NOTULEN VAN DE TE MAGELANG OP DEN 17DEN, 18DEN, EN 19DEN MAART 1913 GEHOUDEN BIJEENKOMST DER OP JAVA EN MADOERA WERKZAME AMBTENAREN VOOR DE INRICHTING VAN HET VOLKSCREDIETWEZEN (*Report of the Meeting of Popular Credit Employés resident in Java and Madura, held at Magelang, the 17th, 18th., and 19th. of March* 1913). Batavia, 1913

DE VISSCHERSVEREENIGING TE TEGAL (*The Tegal Fishermen's Association*). Batavia, 1913.

VERSLANG VAN HET VOLKS-CREDIETWEZEN LOOPENDE TOT ULTIMO JUNI 1913 (*Report on Popular Credit up to June 30th.*, 1913). Batavia, 1913.

VERZAMELING VAN EENIGE BESLUITEN EN CIRCULAIRES BETREKKING HEBBENDE OPHET VOLKSCREDIETWEZEN (*Collection of Decrees and Laws relating to Popular Credit*). Batavia, 1913

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VERSLAG OVER HET DIENSTJAAR 1913 (1° BOEKJAAR) VAN DE CENTRALE KAS (*Report of the Central Bank for the Year* 1913 — *the first Business Year*). Batavia, 1914.

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KIELSTRA (J. C.) : De " Centrale Kas " en hare geschriften (*The Central Bank and its publications*). Extrait du " Tijdschrift Binnenlandsch Bestuur " (*Review of the Ministry of Internal Affairs*) 1914. Bavavia, 1914.

§ 1. THE NEED OF AGRICULTURAL CREDIT AND EARLY ATTEMPTS TO PROMOTE IT.

The bad harvests of 1901 and 1902 in Java caused a terrible famine and this period may be regarded as the critical moment of the strange economic enfeeblement from which these fertile lands suffered during the latter years of the past century and the beginning of the present.

The Government came energetically to the help to the native population by a liberal distribution of money and food, chiefly rice. But it was evident that this method of assistance, which encourages fraud and laziness, could only be temporary especially in the case of a people so thriftless as the Javanese.

It was, therefore, necessary to consider the best means to restore prosperity on a stable foundation to the people, and to accustom them to a more modern system of social economy in which money would be the mainspring in the commercial machinery instead of being used, as it had been up to then, merely as a means of procuring superfluities. One of the most efficacious means for regulating and facilitating the relations between cultivators and buyers is undoubtedly popular agricultural credit. M. W. P. de Wolff van

Westerrode, governor of the department of Poerwokerto, knowing the good results of agricultural banks in the mother country, had already contemplated, before the crisis of 1901, the establishment of similar banks in the colonies. In 1898 he published his views on the subject in the *Tijdschrift voor Nijverheid en Landbouw in Nederlandsch Indië*. He had himself made a practical attempt of the same nature in establishing at Poorwokerto a " Charitable loan, savings and agricultural bank " and in 1900 the central Government requested him to make a statement of his views as to whether it was desirable that the colonial government should take steps to introduce such credit and should give it financial support. In 1903 M. de Wolff van Westerrode published this report, which is well furnished with documentary evidence and is very interesting. His judgment on Javanese financial economy is very severe. In his opinion, if it were desired to liquidate the accounts of the Javanese, an immense majority of the population would have to be declared bankrupt. Only at rare and short periods, as immediately after the harvest, could the normal Javanese cultivator show more assets than liabilities. Some months, some weeks, even some days after the storage of the *padi* (rice) crop in the barns of the peasantry, these barns are all empty while those of the capitalists (chiefly Chinese) are full.

The Javanese do not contract debts on account of any absolute insufficiency of means to meet the cost of necessary provisions. In such a case — we still quote the report of 1903 — the deficit would continually increase. Money lenders exact exorbitant interest, ranging from 24 to 30 % per annum for considerable loans and from 60 to 100, 120 % and even more for small sums. The poor debtors would, therefore, only have in front of them the certainty of indigence and death from hunger. Such deaths, however, are of rare occurrence. We may, then, conclude that a Javanese goes into debt, not because his gains are too small but because of his repugnance to the formation of any sort of capital. A man of the people is willing to sacrifice all his earnings except what is strictly necessary, to procure himself some luxury. And first among these is repose ! If the wages of a coolie are 1 fr. per day and he can live on 50 centimes he will only work on alternate days. If he have higher wages, he buys jewellery, fine clothes or improves his way of living. However, we must not forget that for this thriftlessness there are attenuating circumstances in the habits of the country, which lend themselves to exaggerated expenditure. The higher one of these islanders rises in the social scale, the more he is imposed upon by his family and connections.

Notwithstanding his low opinion of the economic capabilities of the people, M. de Wolff van Westerrode made very persistent efforts to carry on his bank at Poerwokerto, putting in practice principles which later were recommended in the voluminous report compiled by Mr. F. A. Nicholson for the Government of Madras, namely a limited sphere of operations, governmental assistance granted only in case of insufficiency of local resources, encouragement of joint and several liability, and of co-operation, strengthening of communal autonomy. His model was the Raiffeisen bank,

that is a combination of a bank of agricultural credit with a savings-bank, the whole under government supervision. He declared, however, that a popular credit bank would have no chance of success in Java unless based on small local banks founded and administered by the village notabilities who are perfectly conversant with the needs and the credit of the people. These local banks should be dependent on a central departmental bank, performing the functions of a savings, credit and deposit bank, at the same time equalising the credit of the local banks by covering the deficit of one with the surplus of another. As long as the population continues in its present state of thriftlessness the departmental bank should continue to direct the movement, but as soon as the situation improves, the connection between the departmental and local banks could be strengthened and they could even be amalgamated.

The results of the working of the local bank of Poerwokerto in the few years between its establishment (1899) and the report (1904) were not satisfactory, and M. de Wolff van Westerrode threw the blame for this on the native authorities who, according to his opinion, had not shown the necessary zeal and sympathy. To avoid such disappointments as he had met he considered governmental control as absolutely indispensable. Though in no way enthusiastic as to his own experience, and believing that the Javanese are, generally speaking, totally devoid of the virtue of economy and more thriftless than any other Orientals, he asked the Government to favour the extension of agricultural credit by establishing small local banks and departmental banks, and to link these innovations to one of the rare pre-existing native institutions of co-operative character, the *loemboeng dessa*.

§ 2. A CO-OPERATIVE INSTITUTION: THE LOEMBOENG DESSA.

The so-called *loemboeng dessa* is a barn built by the commune as a magazine for *bibit* (seed rice). The customary law requires all agriculturists who make use of this co-operative institution not only to restore, at the time of harvest, the quantity of seed taken but to add from 25 to 50 % more as interest. The surplus arising from this system is consumed in the frequent seasons of scarcity.

This institution is indigenous and very ancient, but it often leaves much to be desired in regard to its administration. Even in 1837 the Government recommended its officials to supervise the management of the *loemboeng dessa*. M. de Wolff van Westerrode, through fully cognisant of its defects, wished to find in it the necessary link with modern popular credit; he recommended that the *loemboeng dessa* should be protected and extended and that their management should be improved. "When," he says, "the people will have learned, after some years, honestly to manage the joint supply of seed rice, they may then be ready to carry on a local bank."

The Government was of the same opinion, and after the famine years of 1901, 1902, and 1903, during which it had directly helped the people by the distribution of rice and money, it began to encourage the *loemboeng dessa*. M. de Wolff van Westerrode was dead and to M. H. Carpentier Alting was entrusted the direction of the enterprise. He boldy entered on the course prescribed by his predecessor, beginning by strengthening the institution, which he considered a very safe point of departure, for in general it could only dispose of the savings made by the people of the village, and could neither effect changes too rapid in their habits, nor a too sudden depreciation in money.

As the *loemboeng* is a communal institution for which the village is responsible there was no need to give it an independent legal existence; when needful, the commune will appear in legal proceedings.

If the *loemboeng* is to preserve its communal character, the creation of such institutions common to several villages must be avoided. In such a case the *loemboeng* might easily be considered as a governmental institution and would thus lose its original co-operative character. Centralisation would also entail the transport from one village to another of the rice when borrowed or repaid, causing needless labour and expense.

The *loemboeng dessa* soon became popular. Even in 1908, M. Carpentier Alting wrote: " The native population rarely expresses its opinion on institutions recommended by the authorities, but they have repeatedly followed the example of their neighbours and asked permission to establish a *loemboeng*. These facts, combined with others, such as the care taken in the construction of the barns and the imposing ceremony of opening, show that the institution finds favour with the population. "

From that time moreover good results began to appear: " Though the influence of the *loemboeng* has not been so great as some expected, nevertheless it has frequently been observed that the working of the *sawah* (rice-fields) is improved, that mortgages have diminished and the number of petty thefts decreased. " Though considering the seed-rice stores but temporary, and destined to disappear when the Javanese " come of age in money matters, " the colonial government never wearies in improving their management. Their present importance is proved by the financial report of 1914 ;

Their number was then 12,716 (of these 242 in the island of Sumatra) their stock, amost entirely free from any obligation to repay, amounted to 2,753,000 *picols* and their reserve in cash to 3,320,000 florins, while their debts amounted only to 920,000 florins.

According to the latest rules, the *loemboeng dessa* is founded by means of contributions in kind from the people of the village or less frequently by a contribution, also in kind, from the government. The seed-rice is lent on condition of repayment, with the addition of 25 to 30 %, at the next harvest. Almost everywhere the rice brought as repayment by the peasants is sold by the *loemboeng* and special seed-rice is bought, so as to avoid deterioration in quality, because the best of the crop is never given in payment. If what the peasants give were used as seed the general diminu-

tion of the yield would in a few years outweigh the advantage the *loemboeng*.

When all debts are paid the rate of interest is reduced and a reserve formed.

The *loemboeng* is managed by a committee of three agriculturists and the headman of the village. The committeemen receive as remuneration a part of the joint profits. The books are kept by an accountant who travels from village to village.

The beneficent influence of the *loemboeng* can be fully exercised only in villages where the people live almost exclusively by the cultivation of rice. It prevents the too rapid passage of the crop from the hands of the farmers to those of the dealers ; thus avoiding a great fall in the price of cereals during the harvest and immediately after, followed by a rise some months later, when the rice has been monopolised. At the present time the result of the wise management of the *loemboeng* is that the price remains almost invariable throughout the year, and this stability has a good effect on the feeding of the people and the wages of labourers. The cultivator is also enabled to break up his land at the proper time, without undue haste.

§ 3. Village banks

Where the cultivation of rice is not the only source of wealth, and where increasing means of communication encourage the producer to extend his trade by growing crops for exportation, the *loemboeng* loses its importance and is soon replaced by a local bank.

From the time when M. Carpentier Alting undertook the promotion of popular credit he had a better opinion than M. de Wolff van Westerrode of the economic capacity of the Javanese, and in his successive publications he shows that this opinion was continually growing stronger. In 1907 he wrote : "Among many of the natives, parsimony degenerates into avarice. They put away all their earnings and are contented with a very abstemious mode of life. But in strong contrast with these is the immense majority of the population, who live in utter thriftlessness. There are, unfortunately, very few who can find the golden mean in the rational distribution of their income and expenses." But here M. Alting finds extenuating circumstances. "We must not be too ready to condemn this want of thrift and judgment in a people who live chiefly by agriculture, since their money returns come in once or twice a year and must be portioned out for the whole of the following year. The solution of this problem can only be discovered by those who can arrange a system of income and expenditure, and who have sufficient strength of will to keep within it. It would be unreasonable to imagine that such qualities are common among the populace." In 1912, M. Alting asserts that the native invests his savings, if possible, in the purchase of land ; if not, he buys houses or live-stock, or simply buries

his money in the earth ; as a last resort he takes his savings to the post-office, because he believes his secret is safe there, but he is not yet ripe for an agricultural credit bank. In 1914, M. Alting begins to show confidence ; " It is always desirable to observe objectively and not to take desire for reality ; yet to a man who observes carefully what is going on around him, the conviction will be continually brought home, that the creation of a money market assists the native population to increase and flourish, although the establishment and development of such a market meets with many hindrances which can only be overcome by degrees. It is also clear that the native has an evident inclination to economy, not taking the word in the limited sense of saving money, but as signifying the formation of capital." Lastly, in his report compiled on the occasion of the Universal Exhibition of San Francisco, M. Carpentier Alting says that the opinion so generally current that the native is thriftless and without any idea of economy is founded on incomplete observations and conclusions. The Javanese cultivator, like all other men, desires possessions of his own — land, a house, cattle or simply rice. But as to money his idea is different from ours. To him it is less a means of exchange than a special possession to be used in procuring luxuries. But now that there are many indispensable things which the native can only obtain by means of money he is beginning to estimate it more justly. Through the recent increase in the number of *loemboeng* and communal banks he has learnt that it is not necessary to spend at once all his earnings to protect himself from robbery or from being cheated by his family.

Working on these principles, the colonial administration is endeavouring gradually and without disconcerting suddenness, to free the people of Java from usury.

This usury generally takes the form of long-term mortgage loans, and of advances.

Mortgages at a high rate of interest are the most frequent form of agreement among natives, one man handing over to another his land, his fruit trees, or his houses as security for a debt, or selling them to him with right of redemption.

Advances are made on standing crops or with a contract of *métayage* by which the peasant pays to the lender, instead of interest of any kind, half the crop produced solely by his own labour. In 1913, mortgages were still so frequent that more than half the value of the crops found its way into the pockets of money-lenders.

While condemning this system, M. Carpentier Alting seeks to prove that it is inevitable under the circumstances. According to him, the money-lenders always need of the labour of the peasants to enable them to collect their interest regularly, and as the natives have no desire to capitalise or to produce with regularity, the money-lenders could not compel them to work except by means of advances. Such advances had in general no other object than the regular and continuous cultivation of the land and did not degenerate into usury for its own sake.

Where the *loemboeng* was insufficient for the exigencies of modernised

life, small local banks (*dessabankjes*) for credit and saving on a minute scale were established to aid the cultivators in freeing themselves from the capitalists by whom they were exploited.

Save in exceptional cases no loan is made by such banks exceeding five florins (about ten francs). The maximum is absolutely fixed at ten florins. Repayment is made in four to six instalments, at intervals of a week or a fortnight. A monthly rate of interest is generally calculated at 2 %, and besides this there is a further addition of 6 or 8 % to the principal, which is not repaid without many previous formalities.

By means of this addition to the principal the bank accumulates a considerable capital in a relatively short time.

From the time of its establishment the little bank of the *dessa* has proved itself a great benefit to itinerant dealers and small tradesmen and artisans. Usurers who were accustomed to lend money at 10 % per day soon felt the effects.

But the evolution of the *dessabankjes* could not go on without encountering difficulties. The directors of the departmental bank of Magelang were still complaining in 1912 that the *dessabankjes* were managed by natives without education, and they expressed a hope that the secondary schools for natives, opened some years previously by the colonial government, would bring about an improvement. In 1913 the same directors considered the cost of supervision too high, and in 1914 they asserted that the solvency of the cultivators still depended solely on the excellence of the crops, and that it was always very difficult to make a Javanese understand that he was expected to pay his debts unless it was absolutely impossible for him to do so.

The echo of similar complaints is heard in the statement of the working of a bank for fishermen at Tegal, although this bank is in a flourishing financial condition, showing a profit of 11,000 florins, and having lent to fishermen sums amounting to 15,000 florins.

The government, however does not allow itself to be discouraged because the beneficial influence, though indirect, is very evident.

In his report prepared for the San Francisco Exhibition, M. Carpentier Alting describes the popular bank, after successive improvements, as a legally recognised body, the management of which is analogous to that of the *loemboeng dessa*. Its capital is in most cases formed by means of a loan from the departmental bank and sometimes from the savings of the *loemboeng dessa* or from communal property. Compulsory deposits, already spoken of, are in part returned on the occasion of great fasts or important festivals. In some villages part of the deposits is converted into shares at from one to five florins per share. The identity of the debtor is ensured by taking finger-prints, a very practical method imitated even by purely native institutions.

In spite of these precautions, the *dessa* bank requires a surer basis than native credit, and also needs an institution which could utilise in a practical manner the capital resulting from the surplus of the deposits. This need is supplied by the departmental bank (*afdeelingsbank*).

§ 4. The Departmental banks.

According to the principle generally adopted by the Dutch colonial government the *afdeelingsbank* is linked with a pre-existing institution, the *prijaji* bank. In 1907, M. Carpentier Alting spoke of these banks in the following terms: " In Java for about ten years past there have been societies which were established as savings-banks, and co-operative banks for making charitable loans to native employés; they then began to lend their surplus funds to cultivators and artisans, and altered their rules in conformity with this new object. They are now called charitable loan, savings and agricultural credit banks. "

The rules of this new credit institution, originally drawn up by M. de Wolff van Westerrode, were altered as required. The present organisation of the *afdeelingsbank* is described by M. Alting in his report for the San Francisco Exhibition. He says the sphere of operations of the departmental bank in Java is limited to one department, but in other possessions it extends sometimes to a whole province, or a district containing a population of from 250,000 to 1,000,000. If often has branches managed by notabilities of the country, European and native.

Although its aims are philanthropic, and it offers no remuneration to its directors, the bank is managed on strictly commercial principles by a responsible manager — almost always a European — and a mixed staff. The central government gives all the needful grants (127,000 florins in 1913). During the first years of the banks, the government lent them considerable sums at 4 % interest, to help them to form a capital. The interest was not paid by the bank but added to its reserve fund. From 1913, the date of the foundation of the central bank, of which we shall presently speak, the government only lends for purposes which have too large an element of risk to allow of the Central Bank investing its funds in them (for instance, the importation of foreign cattle, the colonisation of other islands by Javanese, etc.). The resources of the banks are derived: (1) from their own reserves, formed of deposits made for periods of from three to twelve months with interest at from 4 to 6 %; (2) savings withrawable without notice; (3) deposits at 6 % interest per annum, compulsory for all borrowers, as in the local banks; (4) current accounts with local institutions and communes, bearing interest at from 2 to 6 %; and (5) loans.

Departmental banks lend to native producers who belong to credit institutions for encouraging agriculture and fishing, and favour every kind of productive labour, facilitating financial relations by the issue of bills, cheques, etc. The rate of interest on the loans to the smallest institutions is from 12 to 18, and sometimes 24 %. The banks accept personal or collective guarantees — thus encouraging the idea of mutual liability — or mortgages on common rights, servitudes and land dues, that is on the customary right of the people to utilise a part of the crown-lands in their neighbourhood.

It is evident that a local bank, resting on a foundation so insecure that it is obliged to require interest at 18 %, cannot enter into direct relations with great international institutions of finance, nor yet with the government. Another intermediate link is needed to connect native with European society. For this reason the government in 1913 established a central bank, with an authorised capital of five million of florins.

§ 5. The central bank.

The aim of this new institution is to procure the resources needful for the working of popular credit institutions, and to administer uninvested deposits. The Central Bank exercises supervision over all these institutions, and is authorised to carry out loan transactions, to make purchases of bills, and movable and immovable property in order to provide the needful resources. The employés of the Central Bank are appointed by the government, but paid by the Bank. The Bank undertakes, for payment, to keep the accounts of the popular banks. It pays to the central government on the original capital interest equal to that paid by the government itself (3.16 % in 1914). It lends to the departmental banks at 6 %. Besides this the government has entrusted to the Central Bank the administration and distribution of special funds placed at its disposal to relieve disdress among the people (for instance the *scarcity fund*). Lastly, the Central Bank carries on an active propaganda to promote popular credit by distributing large numbers of booklets and pamphlets.

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It is evident from this short sketch that popular credit in the Dutch East Indian possessions does not, as in other countries, rest on co-operation, and that it is still everywhere under the control of the administration by which it was established.

It was impossible to act otherwise, because the spirit of co-operation was still too weak. The employés alone among the natives, as we have seen, founded co-operative savings-banks (*prijaji* banks), but these with a few exceptions have all disappeared. Some attempts at co-operation among natives undertaken during the last few years have failed because the members thought only of their individual rights, and were unwilling to make any sacrifice for the community. But these attempts showed a desire for progress, and induced the government to consider the subject of legislation with regard to co-operation — legislation which should as far as possible respect existing traditions.

The supervision of local institutions — banks and *loemboeng dessa* — is entrusted by th government to *mantris*, itinerant native inspectors, each of whom supervises about fifty banks and is in his turn under the departmental and provincial authorities. A government inspector (*regeer-*

ungsadviseur) supervises the whole system of popular credit, and directs its working. He belongs to the Department of Internal Affairs and resides at Batavia.

It may be presumed that popular credit has a great future in the Dutch East Indies ; at the close of 1913 the position of the different institutions, according to M. Carpentier Alting, was as follows :

1st. *Loemboeng dessa* (in Java and Madura)

(barns for storage of seed rice).

Number: 12,282. Assets: 2,661,000 picols of *padi* (rice) worth in florins 2,988,000
Liabilities: 218,000 picols of *padi* (rice) worth in florins 902,000

2nd. *Dessabanken* (village banks).

In Java and Madura: Number 1300. Assets in florins 800,000
Liabilities. 418,000
(comprising deposits rising to fl. . . . . 222,000)
Other islands: Number 406. Assets in florins 112,000
Liabilities (deposits) . . 109,000

3rd. *Afdeelingsbanken* (Departmental banks).

	Number	Assets	Liabilities				
			Due to the government	Due to the central bank	Deposits	Special Deposits	Reserves
Java and Madura	74	fl. 15,768,000	25,000	872,000	8,716,000	4,728,000	1,427,000
Other islands . .	6	1,128,000	47,000	249,000	249,000	139,000	49.000

NOTICES OF SOME RECENT PUBLICATIONS RELATING TO CREDIT.

BRITISH INDIA.

SAYER (WYNNE): THE DEVELOPMENT OF AGRICULTURAL CREDIT IN INDIA. — *The Agricultural Journal of India.* Vol. X, Part III. July, 1915, pp. 269-277.

In the *Agricultural Journal of India* Mr. Wynne Sayer, Assistant to the Agricultural Adviser to the Government of India, examines briefly the case for the establishment of Land Banks in India. The need for such banks is, he thinks, beyond question, in spite of all that has already been done to help cultivators through Agriculturists' Loans Acts, Agriculturists' Relief Acts and the acts dealing with co-operative credit societies. The Indian cultivator is still as a rule so hampered by debt to private money lenders that he can seldom find the capital necessary for the carrying out of any permanent improvements on his land. Moreover, the cost of production in agriculture is increasing, especially the cost of cattle and labour, so that it tends constantly to become more and more difficult for the cultivator to obtain the capital which he requires in order to improve and develop his holding. The work of agricultural improvement in India, therefore, is compelled to wait upon the development of some scheme for providing long term loans at reasonable rates of interest.

The writer gives a brief account of the system of "National Farm-land Banks" proposed for the United States, and described in an article in the *Bulletin* of May, 1914. Briefly, the American proposal was to establish banks (either joint stock or co-operative, at the option of the promoters) authorised to grant loans on first mortgages on agricultural land up to 50 per cent. of its value, and to issue bonds against the mortgages accepted, — the loans to be used only for the purposes (1) of completing the purchase of the lands mortgaged, (2) improving and equipping such lands for agricultural purposes, (3) discharging debts secured by previous mortgages on such lands. Banks for the same purposes might with success be established in India, provided that the special conditions in India were taken into account. In the present stage of the co-operative movement the Indian banks would probably be profit-making companies somewhat similar to the existing joint stock banks. It would perhaps be necessary to submit the valuations made by the directors of the banks to the Revenue

authorities, for their approval, and to grant the banks special facilities for summary recovery in case of default.

Mr. Wynne Sayer does not pretend to discuss the question in all its bearings. His article is suggestive rather than informative, and he asks only that in view of the remarkable results obtained by land banks in Europe, the question of establishig them in British India be taken into serious consideration.

UNITED STATES.

PUTNAM (GEORGE E.): AGRICULTURAL CREDIT LEGISLATION AND THE TENANCY PROBLEM. The *American Economic Review*. Vol. V, No 4, December, 1915, pp. 805-815.

The chief point which Mr. Putnam examines in this article is the claim, so frequently made in recent discussions upon the credit problem in the United States, that the provision of cheap credit for agriculture would in itself be a remedy for what is generally referred to as the "evil" of tenancy. It is an undisputed fact that the proportion of tenant farmers among the farmers of the United States has been rapidly increasing; and the situation is viewed in many quarters with a good deal of alarm, — hence the numerous proposals for land credit reform.

Most readers will regret that the writer deals so briefly with a question which is of such grave moment to the future of American agriculture and which has given rise to so much specious and irrelevant argument; but even within the limits which he has set himself, Mr. Putnam succeeds in making his views quite clear.

He first recapitulates briefly what has actually been done in recent years in the matter of legislation upon agricultural and land credit. Seven states have passed laws for the organisation of co-operative credit associations, but these associations, it is recognised, are of minor importance by comparison with the institutions for the provision of long-term land credit which have been established in a number of states. Massachusetts, Utah and Wisconsin have provided for the formation of competitive farm-land banks under state supervision; the New York legislature has established the Land Bank of the State of New York, an institution owned and controlled by local savings and loan associations; while Missouri, Montana and Oklahoma have adopted some system of state loans, abandoning all hope of solving the rural credit problem through private initiative. These measures have certain features in common. They all contain plans for providing loans, repayable by amortization, for longer terms than are at present usual, and for the issue of bonds on the collective security of farm mortgages. They differ mainly with regard to the effects which it is intended they shall produce upon the rate of interest paid by the borrower. One type attempts no more than to eliminate waste by improving the

method of making loans and by giving greater mobility to funds seeking safe investment; while a second type, represented by the laws of Missouri, Montana, New York and Oklahoma, seeks to secure a material reduction in the farmer's rate of interest either through the organisation of a strong central bank or through some programme of state aid.

The writer then proceeds with his main questions. Is it desirable to curtail the growth of tenancy? and, If any reform measure succeeds in strengthening the borrowing power of *all* farmers, will it necessarily improve the tenant farmer's prospect of becoming an owner? He answers the first in the affirmative; the second in the negative.

A system of tenant farming is bad, he says, from the point of view of agricultural progress, because the tenant's methods of tillage are wasteful; bad from the social point of view, because the tenant, with no property ties, takes little interest in the development of a wholesome community life; and bad also from the wider social point of view, because if tenancy becomes a permanent condition there will arise a division into classes and an inequality of opportunity entirely opposed to the spirit of American institutions. Therefore it is desirable that tenancy should be, not a recognised condition or status, but merely a stage towards ownership. Admitting this, to what extent is it true that the tenant is compelled at present to remain a tenant because cheap and abundant credit is not available for his use?

Apparently to a limited extent only. The increase in tenancy in the last twenty-five years is to be attributed, not so much to defects in the land credit system as to the fact of rising land values. The great increase in prices for agricultural products led, especially after 1900, to a phenomenal rise in the value of land. The farmers themselves, merchants, bankers and private investors generally, have been, and still are, imbued with the spirit of speculation; and land throughout the whole country, though particularly in the Middle West, is being held in the hope of its yielding an unearned increment. As the writer says, "The immediate effect of this speculative activity has been to raise the value of land far above the capitalization of its rent at the current rate of interest. It has placed a premium on tenancy and wasteful farming. Investigations of the Department of Agriculture covering three representative areas in three essentially agricultural states have shown conclusively that the present ratio of farm earnings to expenses is extremely unfavourable to land ownership." In other words, the rapid rise in land values which has been taking place has made it profitable to own land where the intention has been to sell at some future time, but more profitable to rent land when the question has been simply one of making a living out of agriculture.

If the speculative element in dealings in land were eliminated, the price of agricultural land would soon adjust itself to the land's income-yielding power; and undoubtedly it would then be easier for a tenant farmer to become, within a reasonable number of years, the owner of his farm. But there is nothing to prove that the provision of credit facilities available to all farmers would do anything to check speculative invest-

ments; and in fact, other things remaining equal, the provision of credit for land purchase would have quite the opposite result, stimulating instead of curtailing the desire to acquire land in the hope of reaping profit out of rising land values. Any scheme, in fact, which is intended to help tenant farmers must be limited to tenant farmers; but, so easy is it in America to raise the cry of "class legislation," that it would probably not be possible to impose such a limitation. It would, however, be possible to restrict within narrow limits the amount which any individual might borrow; to limit the purpose for which loans would be granted solely to acquiring land; and to make it a condition that the land should be cultivated for a definite period of years or until the loan is repaid.

Any such scheme must, in Mr. Putnam's opinion, be the work of the federal Government. Direct aid for tenants in the acquisition of their farms is beyond the province of private initiative, and cannot be left to the individual states any more than could the administration of the Homestead Act be left to them. What could be left within the province of the states is the question of providing *landowners* with greater facilities for obtaining long-term credit, and the necessary capital might be furnished by land credit banks working for profit, incorporated under state laws, supervised by state officers, and authorised to issue bonds on the security of approved farm mortgages. But with regard to the question of helping tenants to become owners Mr. Putnam concludes that the larger programme of direct aid is one to be instituted by the federal Government, and in his opinion, it is as logical for that Government to grant special aid to the young man desiring to own a farm as it was to adopt the free land policy which made ownership rather than tenancy the characteristic form of land tenure in the United States.

HERRICK (MYRON T.): SOME BAD RURAL CREDIT LAWS. — *The Economic World*. New Series Vol. X, No. 21. November 20, 1915.

Mr. Herrick's article is a reprint of an address which he delivered before the Illinois Bankers' Association at its meeting in October, 1915.

The rural credit movement in the United States, according to Mr. Herricks' view, has got thoroughly out of hand, largely, if not entirely, because the Agricultural Commission of the American Bankers' Association adopted towards it an unsympathetic attitude and left the problem to be solved without the benefit of its expert advice. As a result, "Properly regulated private enterprise and a wider extension of rural co-operation have been discarded as a solution. The introduction of correct principles in mortgaging has been ignored... The aim has been centred on mere interest rates, instead of remaining pointed at the mobilization of credit and the effective use of resources. Cheap money through Government intervention and despite market conditions has become the war-cry of the farmer's friend."

Laws dealing with agricultural or with land credit in some form have been passed in fourteen states, in the Philippines, and in Porto Rico, while the *Federal Reserve Act* of 1913 contains a clause which authorizes National Banks to invest a certain proportion of their funds in farm mortgages. These laws are of widely differing types, some merely legalising co-operative credit associations, some extending the powers of existing building and loan associations, some (like the New York law) establishing a central land credit institute ; but, with the exception of the California law, they all, (it is asserted) in one way or another violate the fundamental principles of sound banking. The laws passed in Massachusetts, New York, North Carolina and some other states, which aim at encouraging rural co-operative credit, are all, in Mr. Herrick's opinion, equally bad, and are doomed to fail to achieve their avowed object of encouraging thrift, the cause of which will lose rather than gain by the granting of exemptions from taxation, the restriction of dividends and the mere granting of cheap loans. American farming is now too far advanced to require tax exemptions or any other form of state aid ; all that is needed in each state is a general law legalising for associations whatever is now legal for incorporated companies. Under such laws the farmers would, it is claimed, be able to organise and conduct whatever banking or commercial enterprises would best help them.

With regard to land credit, what is needed again is not special exemption and privilege, but " legislation of a general nature, available for persons irrespective of class, " easier methods for proving titles to land, and more effetive means for regulating the issue of bonds and debentures.

The writer of the article is recognised as a keen student of agricultural credit problems and he has a wide knowledge of existing systems in many countries. He is, therefore, entitled to be heard with respect ; and, even if we make due allowance for rhetoric, it is a matter for serious consideration when he recommends " wiping laws off the statute books, " and speaks of " the storm of objectionable legislation that has recently laid waste the country. "

MORMAN (JAMES B.) : PRINCIPLES OF RURAL CREDITS. 1 vol. pp. 296. — *The Rural Science Series*. The Macmillan Company : New York. 1915.

Dr. John Lee Coulter in an introduction to this volume explains that the work is based on the material found in *Senate Document* 214 and a number of other papers not ordinarily available to the general reader, and that the motive of the book is in fact the presentation of that material in something like popular form. The *Document* in question has already been reviewed here (1) and our readers are also familiar with the work of the two Commissions of enquiry which collected the information contained in it (2).

(1) See the *Bulletin*, September, 1914, p. 38.

(2) Articles appeared in the *Bulletin* of May, 1914, p. 80 and November, 1914, p. 83.

Mr. Morman deals in Part I with " Methods of Financing Farmers in European Countries, " and he has been well advised in re-arranging his material, dividing it by subjects and not by countries. Thus he deals, for example, in separate chapters with " Personal Credit for the Landowning Farmer," " Co-operative Farm Mortgage or Long-Term Credit, " and " Non Co-operative Farm Mortagage or Long-Term Credit. " The last chapter of Part I is devoted to a summary of the " Characteristics of European mortgage Credit."

Part II is entitled " A Constructive Credit System for American Farmers " but even if the author's moderate proposals were all adopted and put into practice the result would hardly amount to the establishment of a system. What he says, in effect, is this: Protect the farmers against usury; encourage them to form co-operative societies by enacting suitable laws in the separate states: adopt a simpler and less expensive system of land registration; and, having helped them so far, leave them free to make the best terms they can with investors for the use of capital. Speaking of mortgage credit for instance, he says: " But if, by legal enactment, the amortization of farm mortgages should in future be made compulsory, then it would make little difference whether the farmers themselves, private capital, or the state furnished the money for the purpose. What the farmer needs more than anything else are mortgage loans at reasonable rates of interest, the privileges of the amortization system and protection from the evils of foreclosure. He does suggest that the states should make long-term loans to farmers on first mortgage at reasonable rates of interest and on the amortization plan of repayment, but he states clealy that such loans should be granted merely as a temporary measure, with the object of giving the farmers "immediate relief against the present crude and expensive mortgage system " until they can establish their own co-operative credit societies.

It will be seen that Mr. Morman regards legislation upon agricultural and land credit as a matter for the separate states ; but he urges that the federal Government should undertake an educational propaganda for the purpose of instructing the farming classes in the principles of agricultural co-operation and on the proper use of credit.

ITALY.

GARBERINI (GUSTAVO) : QUESTIONI DI CREDITO AGRARIO. LA DESTINAZIONE DEI PRESTITI. (*Agricultural Credit Questions : The Object of the Loans*). In the " Rivista di Scienza Bancaria ", Rome, N° 56, December 31st, 1915.

One of the most delicate and difficult functions of the special Institutes of Agricultural Credit (that is, the Institutes authorised by special laws to carry on this form of credit) is that of seeing that the sums lent are genuinely devoted to an agricultural object, a matter to which great importance has always been attached. The writer of the above article, contrary to

the generally accepted opinion that the strict adherence to this principle is one of the fundamental conditions of the success of agricultural credit, maintains that it is a mistake which prevents the development of credit. Above all, the introduction of the object as a factor in granting loans implies that the credit is given, not to the farmer who applies for it, but to such and such agricultural operation considered in itself. The personal factor passes into the second line or disappears almost entirely, and the borrower, in place of being the person who insures the utilisation of the capital obtained, becomes a mere instrument in the hands of the Institute which has granted the loan. It follows that the capital loses to a large extent the efficacy which it would have if the person who obtained the loan had the unfettered use of it to meet varying and successive needs. The utility of the capital is, accordingly, much reduced, and it may be affirmed without exaggeration that the interest payable on agricultural loans, even when it is lower than the commercial rate of interest, is generally very heavy. Independently of these theoretical considerations, to fix strictly the object of the loans results in inconveniences which put agricultural credit in a position of inferiority as compared with other forms of credit.

The writer of the article, summarising his ideas, maintains that agricultural credit will only really deserve to be so called when it is granted to the agriculturist, the application to agriculture of the sum borrowed being considered as assured by the habitual occupation of the borrower, and that, to this end, it is necessary to adopt a different principle in the granting of the loans. What should be kept in view is not the importance of the agricultural operation, which is often intentionally exaggerated, but the economic standing of the farmer, the size of his farm and certain moral factors, all of these being estimated as in commercial credit transactions. Any other form of agricultural credit is artificial and ineffective, even if not actually harmful.

SWITZERLAND.

Das Schweizerische Bankwesen in den Jahren 1906-1913. Bearbeitet im Statistischen Bureau der Schweizerischen Nationalbank (*The Swiss Banking System in the years* 1906 *to* 1913. *Report compiled by the Statistical Bureau of the Swiss National Bank*). Berne, Stämpli & C., 1915 69 pp.

The Statistical Bureau of the Swiss National Bank had already published in 1910 in the " Review of Swiss Statistics " (*Zeitschrift für schweizerische statistik*) the results of the researches made regarding the Swiss Banks during the period 1906-1908. In the year 1912 of this Review, the Bureau had completed this report by adding the data relating to 1909. The report now under notice, which embraces the period from 1906 to 1913, has recently appeared and completes the two previous reports.

The report discusses in detail the aggregate balance sheets of the Swiss banks examined by the Statistical Bureau of the Swiss National Bank. These numbered 335 in 1906, 337 in 1907, 341 in 1908, 342 in 1909, 340 in 1910, 336 in 1911, 315 in 1912 and 307 in 1913.

Hermann Schneebeli, Secretary of the Statistical Bureau, who compiled the report, was obliged first of all to overcome a serious difficulty, that of classifying so large a number of undertakings.

He has partially modified the principles upon which the classification adopted in the previous reports was based and has now grouped the banks as follows: From the point of view of their economic character (*wirtschaftliche Form*) they have been classified in 8 groups instead of 6 groups; from the point of view of their juridical character (*rechtliche Form*) 5 groups have been fixed instead of four.

The Swiss credit establishments, considered according to their economic character are thus grouped:

(1) Swiss National Bank (*Schweiz Nationalbank*); (2) Cantonal banks (*Kantonalbanken*); (3) Large banks (*Grossbanken*); (4) Local and medium sized banks (*Lokal u. Mittelbanken*); (5) Loan and savings banks (*Spar- u. Leihkassen*); (6) Mortgage banks (*Hypothekbanken*); (7) Savings banks (*Sparkassen*); (9) Banking trusts (*Trustbanken*).

According to their juridical character they are thus grouped:

(1) Swiss National Bank (*Schweiz Nationalbank*); (2) Endowed State Institutions (*Staatsinstitute mit Dotation*); (3) Share Companies (*Aktiengesellschaften*); (4) Co-operative Societies (*genossenschaften*); (5) Other Institutions (*Übrige Institute*).

The aggregate transactions of the banks has increased steadily from 6,999,268,000 francs in 1906 to 10,724,562,000 francs in 1913, and the mortgage loans, which form one of the most important parts of their business, have increased almost in the same proportion. The amount of the mortgages has in fact increased from 2,545,000,000 francs in 1906 to 3,863,000,000 francs in 1913. The proportion between the mortgages and the total business done has scarcely varied during the years under consideration, having oscillated slightly round 36 %.

Part IV: Agricultural Economy in General*

GREAT BRITAIN AND IRELAND.

PROPOSALS FOR INCREASING THE HOME PRODUCTION OF FOOD.

OFFICIAL SOURCES:

INTERIM REPORT OF THE DEPARTMENTAL COMMITTEE APPOINTED TO CONSIDER THE PRODUCTION OF FOOD IN ENGLAND AND WALES. London, 1915. Eyre and Spottiswoode.

FINAL REPORT OF THE DEPARTMENTAL COMMITTEE APPOINTED TO CONSIDER THE PRODUCTION OF FOOD IN ENGLAND AND WALES. London, 1915. Eyre and Spottiswoode.

REPORT BY THE DEPARTMENTAL COMMITTEE APPOINTED TO INQUIRE INTO THE QUESTION OF MAINTAINING AND IF POSSIBLE INCREASING THE PRESENT PRODUCTION OF FOOD IN SCOTLAND. Edinburgh, 1915. Neill and Co.

REPORT OF THE DEPARTMENTAL COMMITTEE ON FOOD PRODUCTION IN IRELAND. Dublin, 1915. A. Thom and Co.

SPEECHES DELIVERED BY LORD SELBORNE, PRESIDENT OF THE BOARD OF AGRICULTURE, in London, August 26th. and September 7th.; at Bristol, September 10th.,; at Norwich, September 18th; at Shrewsbury, October 2nd. and 23rd; and at York, October 9th., 1915.

SCHEME FOR THE APPOINTMENT OF WAR AGRICULTURAL COMMITTEES. Circular issued by the Board of Agriculture to the County Councils of England and Wales, September 18th, 1915.

THE OFFICIAL GAZETTE OF THE COUNTY COUNCILS ASSOCIATION. London. Issues of October, November and December, 1915.

* To avoid the confusion which may sometimes have occurred between the heading "Miscellaneous Information" which appears in each part of this Review and the title "Miscellaneous," which has been given hitherto to Part IV, we propose henceforth to give the title "Agricultural Economy in General" to this section.

Introduction.

The question of increasing the home production of food is one which has long engaged the attention of political thinkers in the United Kingdom as the country is dependent upon imported foodstuffs to an extent which, even in normal times, has given rise to considerable anxiety. During the present War, the question has naturally become more acute. The rise in the price of wheat has, of itself, induced the farmers to increase the amount of wheat sown and a considerably larger acreage was harvested in 1915 than in 1914. The increase, however, has been partly at the expense of other crops, and the actual increase of food production was not as great as a glance at the figures for wheat alone might suggest.

In the hope of obtaining practical proposals for increasing the production, three Departmental Committees were appointed in June by the Board of Agriculture and Fisheries, by the Board of Agriculture for Scotland and by the Department of Agriculture and Technical Instruction for Ireland "to consider and report what steps should be taken by legislation or otherwise for the sole purpose of maintaining and, if possible, increasing the present production of food" in England and Wales, Scotland and Ireland. The Committees were presided over respectively by Lord Milner, by Mr. Eugene Wason, M. P., and by Mr. T. W. Russell, M. P. (Vice President of the Department of Agriculture and Technical Instruction for Ireland).

The terms of reference instructed the Committees to consider the question "on the assumption that the war may be prolonged beyond the harvest of 1916" and the English Committee, deeming that if an emergency was likely to exist after the harvest of 1916, there were certain steps which would only be effective if taken immediately, presented in July an Interim Report, reserving for further deliberation other matters affecting the home-grown food supply in regard to which the same urgency for an immediate decision did not exist. Their Final Report was published in October. The Scottish and Irish Committees, on the other hand, completed their investigations and presented their Reports in August. With the Majority Report of the Irish Committee was presented also a Minority Report by Sir Horace Plunkett, Founder and President of the Irish Agricultural Organisation Society and for a number of years Vice-President of the Department of Agriculture and Technical Instruction for Ireland.

In considering the various Reports, of which we shall now give a résumé, it will be helpful to bear in mind the differences in the relative importance of the various crops and the various classes of live-stock in England and Wales, Scotland and Ireland. These differences are indicated by the following Table, which also shows the changes which had taken place in the area under crops and the number of live-stock as the result of the European War before the Committees were appointed.

Area of Crops and Number of Live Stock in 1915 *and in* 1914. (1)

Crops	England and Wales			Scotland			Ireland		
	1915	1914	Increase + or Decrease —	1915	1914	Increase + or Decrease —	1915	1914	Increase + or Decrease
	Acres	Acres	Acres	Acres	Acres	Acres	Acres	Acres	Acres
Wheat	2,170,110	1,807,500	+ 362,610	76,863	60,521	+ 16,342	86,530	36,913	+ 49,617
Barley	1,231,720	1,504,770	— 273,050	149,720	194,109	— 44,389	141,680	172,289	— 30,609
Oats	2,088,050	1,929,630	+ 158,420	981,708	919,580	+ 62,128	1,088,569	1,028,758	+ 59,811
Potatoes	463,400	461,620	+ 1,780	144,321	152,318	— 7,997	594,457	583,069	+ 11,388
Turnips	931,760	1,045,090	— 113,330	420,735	430,608	— 9,873	265,122	276,872	— 11,750
Mangolds	413,710	432,370	— 18,660	2,657	1,927	+ 730	82,728	81,570	+ 1,158
Clover, etc. for hay	1,538,070	1,554,910	— 16,840	390,193	405,254	— 18,061	908,848	939,741	— 30,893
Permanent Grass for hay	4,655,030	4,785,450	— 130,420	155,686	156,662	— 976	1,586,866	1,547,772	+ 39,094
Live-stock.	Number	Number	Number	Number	Number	Number	Number	Number	Number
Horses	1,287,180	1,399,550	— 112,370	198,959	209,360	— 10,501	560,917	619,345	— 58,428
Cattle	6,064,150	5,877,940	+ 186,210	1,222.830	1,214,974	+ 7,856	4,843,795	5,051,645	— 207,850
Sheep	17,522,580	17,259,690	+ 262,890	7,059,441	7,025,820	+ 33,621	3,600,067	3,600,581	— 514
Pigs	2,420,030	2,481,480	— 61,450	158,715	152,768	+ 5,947	1,205,249	1,305,638	— 100,389

(1) Returns collected, for England and Wales and for Scotland on 4th. June, for Ireland on 1st. June in each year.

§ 1. The Interim Report of the English Committee.

In its Interim Report, the Departmental Committee on the Production of Food in England and Wales stated that at an early stage in their deliberations they were led to conclude that the only method of effecting a substantial increase in the gross production of food in England and Wales consisted in restoring to arable cultivation some of the poorer grass land that had been laid down since the seventies. In this way a large increase in the area under wheat might be obtained upon the existing arable land, while the newly broken up grass might be devoted to the later sown crops displaced by wheat. They accepted the opinion that an increase in the area under arable cultivation would, with proper farming, add to the production of wheat and other crops for human consumption, without diminishing the capacity of the country to maintain its existing live-stock and its output of meat and milk. While a greater or more effective employment of labour would be required, the Committee were led to believe that over the larger part of the country no such serious shortage of agricultural labour existed as would render their proposals impracticable. They considered, also, that something might be done to assist the farmer in carrying out the work that he was desired to undertake by an organisation of the supplies of labour-saving machinery and of manure.

To increase the production of wheat, oats and potatoes, the Committee pointed out, it would be necessary for the farmers to sacrifice the comparative certainty of their present profits, to change some of their methods, to alter their rotations and to increase their arable cultivation in the face of a shortage of labour. In addition they would have to run the risk, not only of uncertain seasons, but of a fall in the price of wheat at the conclusion of the War. To insure a general movement in the desired direction, the Committee considered it essential that a minimum price should be guaranteed for a period of several years.

As to the amount of the minimum price and the number of years for which it should be promised, varying opinions had been expressed. After careful consideration, the Committee decided to recommend a guarantee of a minimum price of 45s. a quarter for all marketable home-grown wheat for a period of four years. They estimated that, if such a guarantee were given, the area cropped with wheat, which was just under 2,000,000 acres, would be increased by at least another million acres in 1916, in which case there would be 4 or 5 million quarters more wheat grown at home, or fully six weeks' additional supply for the whole of the United Kingdom. For many years before the great fall in prices, which commenced in the later seventies, the acreage under wheat in England and Wales was constantly well over 3,000,000 and in one year was as high as 4,200,000. The Committee were of opinion that, during the period of the proposed guarantee,

the average annual wheat production which prevailed in the early seventies might be once more attained and even exceeded.

As to the method of carrying out the guarantee, the Committee recommended that payment to the farmer should be regulated by the difference between 45s. and the "Gazette" average price of wheat for the year in which the wheat is harvested, the farmer being left free to dispose of his produce in the open market.

The Committee noted the objection to their proposal that it was conceivable that no great quantity of additional wheat might be produced beyond what would have been grown had no guarantee been offered, and that the State might, if wheat prices fell, be obliged to pay a considerable sum for a comparatively unimportant result. Rejecting as unworkable in practice the suggestion that the guarantee should be limited to the additional wheat grown by farmers over and above their pre-war production, measured by the harvest of 1913, the Committee recommended that the guarantee should be confined to those farmers who were able to show that they had made a reasonable effort to increase the production of wheat. As a test they proposed that a farmer claiming the grant should be asked to show (*a*) that he had increased his area under arable production by at least one-fifth over the similar area in October, 1913, or, in the alternative (*b*) that at least one-fifth of his total acreage under grass and annual crops was actually under wheat.

This should, however, represent only the minimum of effort required to secure recognition.

The Committee considered the question whether, if a minimum price was secured to the farmer, there should not be a maximum price at which the Government would have the right to take over all homegrown wheat. Without recommending this proposal, which they desired further to consider, the Committee suggested that if, in the opinion of the Government, a maximum price was desirable, it should be fixed at not less than 55s. per quarter.

A further recommendation of the Committee was that the Government should, without delay, create a local organisation which, in every district, should give farmers a clear lead as to the crops which are considered desirable. The procedure suggested is set out in an Appendix to the Report and is as follows:

(1) An organisation under the President of the Board of Agriculture and Fisheries shall be specially constituted for the purpose of carrying out the scheme.

(2) A communication shall be sent to each County Council, outlining the scheme, and enclosing a statement showing for the particular county (*a*) the area under the plough and the acreages under wheat, oats and potatoes in the years 1873 and 1914, respectively, and (*b*) the acreages of wheat and other crops which, in the general interests of the nation, it is considered that the county should endeavour to raise in the year 1915-16.

(3) Each County Council should be asked to arrange for the appoint-

ment of small committees in all Rural Districts within its area, and in any Urban Districts containing an appreciable amount of agricultural land.

(4) The district committee should usually consist of about five members, of whom at least two should be farmers. If necessary, the district Committees should, at the expense of the Board of Agriculture and Fisheries be empowered to obtain the professional assistance of local surveyors and valuers.

(5) Each district committee should be furnished by the central authority with detailed statements showing, for the district generally, and for each parish within its boundaries, (*a*) the area under the plough and the acreages of the above-mentioned crops at the specified dates, and (*b*) the share which the district should endeavour to contribute to the county total.

(6) The district committee should then proceed to consider the capacity of each farm within its area to furnish the desired increase, and the willingness of each individual farmer to undertake his share of the task; and report the result as soon as possible to the central authority, together with all information as to the requirements of farmers in the area with regard to special labour and machines, manures, etc.

(7) The district committee will continue to inform the central authority as to the progress of the scheme, and as to any particular difficulties or requirements which may arise.

The Committee noted that the success of the policy of increasing the arable area must depend to some extent upon the attitude of landowners. They considered that the landowner should be willing to relax any restrictive covenants in the agreements with the farmers which prohibit the breaking-up of pasture land. They also considered that the guarantee of a minimum price for wheat should not constitute a reason for increasing the rent, but believed that the goodwill of the landowners could be relied upon to make special legislation unnecessary. They further suggested that the landowners should co-operate with the Government by insisting that their tenants shall farm well.

The effect of the proposed guarantee upon the wages of agricultural labour was briefly touched upon in the Interim Report. Wages had been rising before the War and had risen further since the War, and the Committee expressed the opinion that, if the farmers received the guarantee suggested, they ought at once to raise still further the wages of their labourers. The Committee, with some exceptions, were not convinced that it was necessary to apply compulsion in order to ensure a rise in wages, but they were fully agreed that if it did not result naturally from the guarantee, it would be desirable to take further steps to ensure it. In the meantime, they urged that an inquiry into agricultural wages throughout the country should be instituted, so that complete information might be available.

§ 2. The formation of county war agricultural committees, as recommended in the interim report.

Following upon the issue of the Interim Report, Lord Selborne, President of the Board of Agriculture, convened a series of conferences in London, Bristol, Norwich, Shrewsbury, and York, at which he explained the attitude of the Government towards the recommendations made and the steps which he proposed to take.

Addressing a meeting of representatives of the Royal Agricultural Society, the Central Chamber of Agriculture, the National Farmers' Union, and other organisations, which was held in London on August 26th., Lord Selborne remarked that shortly after the Report had been received the agricultural returns for 1915 came to hand. As compared with 1913, there were 500,000 more acres of wheat under cultivation, an increase of nearly 30 per cent., while the increase in cattle was 384,000 and in sheep 450,000. In view of these remarkable figures, of the fact that the call of agricultural labourers to the colours would be very heavy in the coming year, of the superabundant harvests in Canada and Australia, and of the financial stringency which would prevail after the war, the Government had decided that they would not incur the additional financial liability involved in the proposed guarantee of a minimum price for wheat. He intended, however, to adopt the valuable recommendation that the county councils should be asked to act as the link between the Board of Agriculture and the farmer.

In subsequent speeches Lord Selborne explained in some detail the organisation which he proposed to ask the County Councils to create. The proposals were also formally set forth in a "Scheme for the Appointment of War Agricultural Committees" which was submitted to the County Councils. This "Scheme" we reproduce in full:

"*County Committees.* — Each County Council shall appoint a War Agricultural Committee for the County.

"The Committee may consist either of an existing Committee or sub-committee of the Council with co-opted members or it may be constituted for this special purpose. In any event it will have no statutory basis. Whatever be the method of formation adopted the Committee should be fully representative of all the agricultural interests of the County, whether landowners, farmers, labourers, and others. In those Counties where Committees have already been established to deal with the organisation of farm labour, it will obviously be desirable to co-ordinate their work with that of the War Agricultural Committee, and it is very important that the Committee should include representatives of the Chamber of Agriculture, the Farmers' Union, and other Agricultural Societies or Institutions in the County.

"One of the existing Officials of the County Council should, if possible be nominated to act as Clerk to the Committee, and it is hoped that so far as their other duties will permit the other members of the administrative

staff of the Council will be allowed to give the Committee such help as they can.

" The Board of Agriculture and Fisheries will nominate one of their Commissioners or Inspectors to act as their Local Representative for the purpose of the scheme, and it is hoped that be will he invited to attend the meetings of the Committee.

" *District Sub-Committees.* — The County Council or the War Agricultural Committee when formed shall appoint a local committee for the area of each Rural District in the County, and of each Urban District which contains any considerable amount of agricultural land, to be composed of persons representing the various agricultural and horticultural interests of the District.

" In most cases the utility of the local committee will depend upon the choice of its Chairman and its Clerk.

" *Functions of the Committees.* — The principal functions of the Committees will be as follows:

" (1) To organise the supply of agricultural labour within the County.

" The Board will arrange for the supply to each County Committee of the information available under the National Registration Act as to the number of agricultural labourers in each Rural or Urban District in the County. The County Committee should then ask the Sub Committees to consider and report whether the supply of agricultural labour in the District is adequate, and if not, as to the extent of the deficiency. These reports should be considered by the County Committees in consultation with the Labour Exchange officials with a view to meeting any deficiency as it arises by promoting co-operation in the use of labour, by the transfer of labour from another District, and by the employment of women or otherwise. County Committees may well devote particular attention to the possibility of training women and encouraging them to engage in agricultural work on the lines that have been successfully adopted by certain County and Provincial Councils.

" (2) To consider how the production of food in the County can be maintained and, if possible, increased, always acting in close co-operation with the landowners, farmers, labourers and the members of the rural community.

" The Board will supply to each County Committee figures showing the acreage under the various crops and grass in each Petty Sessional Division at the present time and in earlier years, which will be a guide to the extent to which an increase in the area under arable cultivation may be practicable.

" The County Committees should endeavour, through the agency of the local committees, to promote an increased production of those crops or stock which can be produced to the best advantage in the various Districts, and will be to the greatest advantage to the State during the War. The principal need at present is an increased production of wheat, oats, potatoes, meat, milk, cheese and bacon. The Provincial Advisory Council for Agricultural Education should be consulted as to the best means of enabling

the services of the staff of the Agricultural College or Research Institution of the Province to be made use of in aid of the purposes of the scheme, and the Committees should endeavour to persuade farmers to avail themselves of such services. Members of public bodies, such as the Chamber of Agriculture, the Farmers' Union, local agricultural societies, and the Agricultural Organisers and Instructors of the Counties should also be employed to advise as to the best and most profitable use of land.

"Efforts should be made to stimulate increased food production by villagers as well as by farmers. Cottagers and allotment holders should be encouraged to live on the produce from their gardens and allotments as much as possible and to increase their production of potatoes, vegetables, pigs and poultry.

"(3) To obtain information as to the requirements and supply of (*a*) agricultural implements and machinery, and (*b*) fertilisers and feeding-stuffs, and to report to the Board any deficiencies in these respects, or in the facilities for obtaining delivery, and also to encourage and promote co-operation amongst farmers for the procuring of supplies and machinery and for mutual assistance in the case of the latter.

"(4) Generally to assist and advise landowners, farmers and labourers in the County, and to inform the Board of any special difficulties which may come to their notice."

In the covering letter, dated September 18th., 1915, which accompanied this circular, it was stated that with regard to the expenses of the Committees it was not suggested that any call should be made upon the rates. Lord Selborne hoped that the County Councils would be willing to lend such assistance as they could from the staff which remained at their disposal, and that, for the rest, most of the work would be done by volunteers. But certain expenses would necessarily be incurred in respect of clerical assistance, printing, stationery, postage, etc., and these would be defrayed out of public funds up to an amount which would be fixed in the case of each county.

The County Councils responded warmly to the appeal and War Agricultural Committees were quickly formed. They are now actively carrying out the functions assigned to them (1).

In another important respect the Government adopted the recommendations of the Interim Report. Speaking at Norwich on September 18th., Lord Selborne was able to announce that the skilled farm-workers who could not be replaced, such as foremen, stockmen, carters, shepherds, blacksmiths, engine drivers, or thatchers, would be placed on the same footing as munition-workers and would not be accepted as recruits.

§ 3. The final report of the English committee.

The Final Report of the Departmental Committee on the Home Production of Food in England and Wales was necessarily more technical in

(1) Notes on the work of the Committees are published in the *Official Gazette of the County Councils Association.*

character than the Interim Report. The Government having decided not to adopt the recommendation that a minimum price for wheat should be guaranteed, the Committee did not further discuss the proposal. They expressed the opinion, however, that there was great need to increase the productivity of the soil by stimulating more intensive cultivation and by bringing under the plough a large area of land at present wastefully devoted to inferior pasture.

During the past 40 years nearly 4,000,000 acres of arable land had been converted into grass, and the process of conversion was still going on. The Committee received evidence that a great deal of this land would produce twice as much meat and milk when under the plough as when in permanent grass, and that more, and not less, stock would be maintained on it if it were restored to arable cultivation, while it would also be producing corn for human consumption.

It did not follow that the larger gross returns from arable farming would always be attended by a corresponding profit to the farmer. The Committee were, however, assured that for some years prior to the War arable farming had been remunerative on all but the wettest and heaviest of soils, that it afforded opportunities for profit not open to grazing, and, particularly, that it could be intensified and cheapened by the employment of machinery in such a manner as to render it possible to pay a higher wage to the agricultural labourers. Under the condition of rising prices prevailing before the War, farmers might have been left to arrive gradually at new methods by the spread of education and the force of example. But, in view of the present emergency, it appeared to the Committee that the action of the State might be called in to hasten the process.

Pointing out that one method of obtaining a substantial increase from the present arable area was the additional use of artificial manures containing phosphates and nitrogen, the Committee made various suggestions for increasing the supply or reducing the cost of such fertilisers.

Sulphate of ammonia is produced in large quantities in England and some 300,000 tons are annually exported to other countries. The Committee recommended that the Government should arrange with those who control the production that a sufficient supply should be available for farmers at as near pre-war price as possible, using, if necessary, their powers to restrict exports for the purpose.

They further suggested that, as freights from the United States are extremely heavy, shipping arrangements should be made for the importation at lower rates of Florida and Tennessee phosphate rock. Similar arrangements could also be made for the importation of such Chilian nitrate of soda as might be required for use in addition to the home-produced sulphate of ammonia.

The production of superphosphate requiring large quantities of sulphuric acid, which is also required for war purposes, the Committee recommended that steps should be taken to assist superphosphate makers to speed up their acid-producing plants.

The Committee further advised that the export even of the lower grades of basic slag should be prohibited or closely restricted.

In regard to feeding-stuffs, the Committee noted with satisfaction the work of the Board of Agriculture in disseminating information as to the nutritive value of the various feeding stuffs available. They recommended that this propaganda should be extended and that the Board should confer with the makers of oil-cakes as to the best means of extending the sources of manufacture and cheapening the supply of feeding stuffs to the farmer, if necessary by limiting the re-export of such materials from England.

The Committee recommended that the Board of Agriculture should take immediate steps to stimulate the breeding of pigs, as animals which can be most rapidly increased in numbers, turn to account food which is now largely wasted, and also provide the meat most widely consumed by the working classes.

To relieve the existing shortage of agricultural labour, it was urged that steps should be taken directed to (1) the retention of skilled workers on the farms ; (2) the better organisation of women's labour, and (3) the release of soldiers still in England for farm work at time of pressure.

Though not allowed to enlist, skilled men were still leaving the farms for other forms of Government work, such as employment at military camps and munition factories. The Committee suggested that this should be discouraged.

The number of women employed in farm work was already considerably above the normal, but, with proper organisation it could have been greatly increased. County committees were recommended to make provision for training women in their areas, and it was further suggested that Government assistance should be given to some central organisation which would register women applicants for farm work, supervise the training of suitable women and co-operate with the Labour Exchanges in finding them employment when trained.

The number of soldiers released by the military authorities for employment in England and Wales during the hay harvest appeared to have been 5,382 and up to September 10th. nearly, 5,000 men had been released for the corn harvest. The Committee recommended that similar measures should be adopted in 1916.

A larger supply of agricultural tractors and ploughs would be of great assistance to farmers. But, owing to the priority which was necessarily given to goods required for War services, the manufacturers were unable to turn out the machines owing to the shortage of labour and material. The Committee suggested that the Government should assist the makers of agricultural machines of proved efficiency in respect of (*a*) labour and (*b*) material, by (*a*) enabling them to retain a certain proportion of their skilled mechanics, and by (*b*) placing them on the same footing, with regard to orders for raw materials or finished parts, as firms engaged on Government contracts.

The attention of the Committee had also been directed to the possibility of increasing the production of vegetables and other foods by the cultivation

of plots of unused land in the neighbourhood of villages and the suburbs of towns. The Board of Agriculture had advocated the formation of Societies for the purpose, but difficulty had been experienced in acquiring the use of suitable land. The Committee suggested that local authorities should be empowered, in the event of a properly constituted society failing to come to an agreement with the owner of a portion of unoccupied land, to take over such land forthwith at a rent to be determined by a valuer to be appointed by the Board.

The Committee expressed regret that the efforts to establish the sugar-beet industry had not gone far enough to test the possibilities of its commercial success. Had the industry been well established, not only would the production of home-grown sugar have been of real importance in reducing imports from abroad, but the by-products would have proved of great value as fodder. The inability of the Development Commissioners to recommend advances to associations trading for profit had prevented entirely suitable schemes from being assisted, and the Committee recommended that this inability should be removed.

The Committee gave careful consideration to a suggestion that a reserve of home-grown wheat should be kept in stack until the last three or four months of the cereal year as an insurance against the possible interruption of supplies, but no scheme which they had been able to devise for the harvest of 1915 appeared to them to justify the cost to the Exchequer and the possible disturbance to the machinery of normal importation which would be involved in its adoption.

In conclusion, the Committee repeated the recommendation contained in their Interim Report that landowners should not withold their consent to the breaking up of grass land, even where restrictive covenants existed and suggested that landlords should see that their moorlands were grazed with as many sheep as they could carry and that parks should be used to their maximum capacity for grazing stock.

(*To be continued*).

SWEDEN.

AGRICULTURAL LABOUR AND WAGES.

SOURCES:

LANTARBETERNAS ARBETS- OCH LÖNEFRHÄLLANDEN INOM OLIKA BYGDER OCH Ä TYPISKA LANTEGENDOMAR (*Terms of Employment and Rates of Wages of Agricultural Labourers, by Districts and on Certain Typical Estates*). Department of Labour and of Social Thrift. Stockholm, 1915.

As far back as 1907 the condition of agricultural labour in Sweden attracted the attention of the Parliament of that country. In 1908 the Government appointed a Commission which recognised the need of extending to farm labourers the statistical enquiries already undertaken for industrial labour, and for this purpose it recommended that four classes of statistical enquiry should be undertaken, namely :

(1) The collection of annual statistics on wages, on the duration of employment, and on the demand for agricultural labour ;

(2) The preparation of statistical returns at longer intervals (say, once in five years) of those data affecting the labouring population which change less rapidly, such as the number and composition of the various groups of agricultural labourers, their age, their condition, the forms of labour contract, etc. ;

(3) Special and local enquiries, to be made occasionally, into the conditions prevailing on certain farms, selected as typical of the agricultural conditions in the several parts of Sweden. Besides this it was considered advisable that the annual statistics should be prefaced by a study relating to the various kinds of farming, the number of large and small holdings, etc. ;

(4) The preparation of special monographs on districts or estates of special interest.

These recommendations were approved by Parliament and by Government, and were immediately acted upon. In 1911 the Department of Commerce, and afterwards the Department of Labour and Thrift, with which was merged the Office of Labour, began the publication of annual stat-

istics on "Demand, Duration of Employment, and Wages of Agricultural Labour in Sweden."

At the same time the enquiries proposed under recommendations (2) and (3) were initiated by sending out question forms which were filled in, partly by the many Swedish agricultural societies, partly by the mayors of 2,400 rural communes, and partly also by persons designated by the agricultural associations who volunteered their assistance. A special form was sent to 309 owners and occupiers of holdings selected as typical of the agricultural conditions prevailing in each district. The 232 replies received were used in completing and checking the information collected from other sources.

The results of these several enquiries are now presented in the publication issued by the Department of Labour and Social Thrift entitled "Terms of Employment and Rates of Wages of Agricultural Labourers." This study is divided into two main sections. The first, after describing briefly the various types of farming characteristic of the different districts, shows what the conditions of agricultural labour are in each case. The second illustrates the condition of labour on estates selected as typical of each district.

The publication is enriched by numerous statistical tables and by a summary of the original returns which afford valuable material to those who wish to obtain a thorough knowledge of the conditions of farming and of farm labourers in Sweden.

I. — *TERMS OF EMPLOYMENT OF AGRICULTURAL LABOURERS IN THE SEVERAL DISTRICTS AND THE DIFFERENT TYPES OF FARMING*

§ 1. Classes of holdings and types of farming.

Three classes of holdings, varying according to the social position of the owner, are found in Sweden: small holdings (*småbundehemman* or *småbruk*) of from two to ten hectares, owned by peasants who farm them either single-handed or with the assistance of their families; medium-sized holdings (*storbundehemman*), generally consisting of farms of from 10 to 50 hectares, cultivated with the assistance of hired labour; and lastly, large estates (*herrgårderna*) consisting of farms of over 50 hectares whose owners limit their labours to organising the hired labour.

The following table clearly shows the relative importance of these three kinds of holdings in Sweden. (1).

(1) The figures refer to 1908.

Classes of Holdings by Size.

Holdings with a cultivated area of —	No. of holdings		Cultivated area in hectares	
	Actual figures	Percentage figures	Actual figures	Percentage figures
10 hectares or less	250,445	69.7	941,475	25.9
From 10 to 50 hectares	100,345	28.0	1,837,130	50.4
From 50 to 100 hectares	5,065	1.4	344,946	9.5
Over 100 hectares	3,262	0.9	517,486	14.2
Total	359,117	100.0	3,641,037	100.0

We thus see that the large estate owners are only 2.3 per cent. of the total number of landowners, but possess 23.7 per cent. of the total cultivated area.

The great length of Sweden and the varieties of climate it enjoys give rise to corresponding varieties in the forms of its rural economy.

The replies received show that in eastern Sweden large and medium-sized holdings prevail, except in the wooded and mountainous districts, where holdings are small. The average size of the farms is from 20 to 26 hectares. Agricultural machinery is extensively used on the large holdings, and its use is gradually spreading among the small farmers as the co-operative spirit develops. The growing of cereal crops, combined with stock-raising, is the prevailing form of agriculture. Forestry holds an important place in some parts of this region.

In Småland and in the Islands the characteristic type of farming, to which the exceptions are few, is that prescribed by the nature of the country, that is to say the cultivation of small plots of land varying from 6 to 8 hectares in extent. Machinery is little used and stock-raising is the main industry. There are supplementary industries, such as stone quarrying.

In southern Sweden the various classes of holding are found side by side; the average size of farms for the whole district is from 10 to 11 hectares, but it varies much from province to province. In the cultivated plains machinery is widely used; in the wooded districts manual labour prevails. The main crops are cereals and roots such as beets, etc. Stock-raising, forestry and fisheries are important industries. As manufacturing industries are highly developed in this region, agricultural labourers can easily supplement their earnings by working in the factories.

The extensive region of western Sweden presents a great variety of types, and the average area of the farms in the several provinces varies from 8 to 15 hectares. Machinery is very generally used, not only on large estates but also on small holdings. Stock-raising is here the principal

industry, but forestry, fisheries, and stone quarries afford valuable sources of supplementary earnings, as do also the small domestic industries and the transport trade.

In northern Sweden small holdings are almost the only form of property; the farms average from 7 to 8 hectares in area, falling as low as 3 hectares in certain districts, an area insufficient for the support of a peasant family. Machinery is little used. Stock-raising is carried on throughout the region and the number of horses and cattle is very high in proportion to the area under cultivation. In this region forestry forms an integral part of farming; in some districts it is the main resource of the workers. Fishing and hunting are also important occupations.

§ 2. Number and distribution of the agricultural population.

The returns of the Bureau of Statistics show that, in 1870, 72 per cent. of the population of Sweden was dependent on agriculture and its allied industries, but that in 1910 this percentage had fallen to 48 per cent. The agricultural population which, in 1900, amounted to 2,756,704 persons, fell in 1910 to 2,663,000; indeed, strictly speaking, it consisted in 1910 of 2,340,113 persons, of whom 18 per cent. were in eastern Sweden, 14 per cent. in Småland and the Islands, 14 per cent. in southern Sweden, 31 per cent. in western Sweden, and 23 per cent. in northern Sweden. Leaving out of account children under 15 and those wives of the peasants who do not take an active share in field work, the population for that year only amounted to 1,092,066 persons, of whom 759,492 (or 69.5 per cent.) males and 332,574 (30.5 per cent.) females.

The small and medium-sized landowners formed a group of about 262,594 men and 25,238 women, to whom must be added 157,905 boys and 138,364 girls under 15 living with their families, besides 44,660 men servants (*dräng* or *tjänar*) and 57,572 female servants (*piga* or *tjänare*). Two-thirds of the members of this group own from 2 to 10 hectares of land; the size of the farm owned by the other third varies from 10 to 50 hectares. The farm is cultivated by the owner himself and by the members of his family, assisted, in case of need, by unmarried farm-servants. There is no clear line of division in this group between owners and wage-earners, and between the hands engaged on farm-work and on house-work. The small landowner often hires himself out as a wage-earner on other farms, and his servant, if he has one, readily passes from field-work to house-work and *vice versa*.

When we come to large farms on which hired labour is of much greater importance, and on which there is a distinct social difference between employer and employed, we find a first category of wage-earners, the administrative staff, to which belong 2,626 managers, inspectors, accountants, and so on. Then comes a group which stands midway between the adminis-

trative staff and the labourer proper, consisting chiefly of overseers; this group numbers 5,948 members.

Then come the specialised farm-workers, who receive a higher rate of wages and who number 3,511 men and 3,002 women employed in the care of live stock, and 6,764 men and 80 women occupied in gardening and fruit-growing. But the main body of this group consists of the so-called *statare*, that is to say of permanent servants living outside their employers' households and receiving from their employers certain rations of food (*stat*), according to the terms of their engagement. (1) The *statare* is the typical labourer on large farms; the increase in their number coincides with the increase in the number of big estates. Women very rarely work as *statare*, there being only 187 women as against 33,351 men.

Side by side with the *statare* is found the *torpare*, who is a characteristic figure in Swedish agriculture. (2) The enquiry made to ascertain the cause of the notable and constant decline in the number of *torpare* shows that many kinds of workers are classified under this name. The *torpare* is generally a peasant to whom the landowner grants for a longer or shorter period a piece of land (*torp*) with a dwelling-house; in return for this the man undertakes to perform a certain number of days of work, or to carry out certtain special tasks on the farm, or to pay rent in cash or in kind. It is rare chat the grant is entirely gratuitous. The *torpare* is considered by the law as a tenant, but the terms of the contract often make him owner of the land granted.

The total number of *torps* in 1910 was 53,005, of which 33.4 per cent. were granted in return for personal services, 9.6 per cent. in return for personal services and money, and 57.0 per cent. in return for money payment only; but their number steadily declines from year to year and there is a strong tendency to convert payment by personal service into payment in cash.

Next comes the class of day-labourers (*daglönare*) which falls into two groups. The first consists of workers (*backstugusittar*) who possess a cottage built on their own land, or on land which they rent, and a small garden, the inadequate yield of which is supplemented by wages earned as labourers in factories or on large estates. This group, which is declining in number, accounted in 1900 for 31,605 males and 22,765 women, or, including their families, for 154,495 individuals.

The second group consists of agricultural labourers proper, workers who own no land and are paid by the day or hour like industrial workers. Their number is constantly growing; in 1900 there were 64,814 men and 5,648 women, or, counting in their families, 194,786 individuals.

The above statements show that it is not possible to distinguish accurately between landowners and agricultural wage-earners as there are no

(1) A kind of *statare* is the so-called *stattorpare*, who receives, in lieu of food stuffs, an allotment or feed for one cow.

(2) The *torpare* has some analogy with the *husmaend* of Norway and the *heuerling* of Westphalia.

reliable data to show how many live exclusively on the yield of their own land and how many depend exclusively on their wages. Consequently, the division of the agricultural population into social groups can only be approximate.

So much admitted the agricultural population may be divided into three main groups : independent farmers, the members of their families, and labourers. The actual figures for the numbers in these three groups in 1900 stood respectively at 422,000, 390,000 and 277,000, and the percentages at 38.6, 35.7, and 25.4. To these must be added the very small group of persons engaged in the management of farms (3,000 individuals or 0.3 per cent.).

If, however, we take into account what has been said about the *torps* and the owners of small holdings, at least 100,000 persons should be transferred from the group of owners to that of wage-earners, and if we assume that from 1900 to 1910 the group of wage-earners diminished in the same ratio as the agricultural population as a whole, we may conclude that, in that year, the total number of agricultural wage-earners amounted to about 360,000 individuals of whom two-thirds were men and one-third women.

The enquiry supplemented these statistical data by detailed information obtained for each district on the composition of the various groups of agricultural labourers, on transfers from one group to an other, and on the ratio between continuous and casual labour. The results of these enquiries may be briefly summarised as follows.

In eastern Sweden the typical labourer is the *statare*, replaced on medium-sized farms by the farm-servant who lives and boards with his employer. The *torpare* are rapidly declining and tend to become, more especially in the case of the smaller ones, day-labourers pure and simple, a class employed almost exclusively on large holdings. The *statare*, and farm-servants engaged by the year, are considered as permanent hands; the others, including the *torpare*, as casual labourers. It has been ascertained that the number of casual labourers is on the increase as compared with that of permanent workers owing chiefly to the growing use of machinery. Individuals, however, frequently pass from the class of casual labourers to that of permanent workers, usually as the result of marriage. In Småland and the Islands, farm-servants and *torpare* are in the majority, but here also they are decreasing in number. Day-labourers who own a cottage (*backstugusittar*) are growing scarce. Here also farm-servants and *statare* are classified as continuous, the others as casual workers. The ratio between these two groups has not varied sensibly in recent years, but there has been a noticeable decline in the actual numbers of workers in both groups.

In southern Sweden the largest class of agricultural labourers is that of day-labourers and workers who have immigrated from other parts of the Kingdom and from abroad (almost always from Russian or Austrian Poland) (1) to perform the seasonal work required in the extensive cultiva-

(1) The number of Polish and Galician annual immigrants during the period from 1911 to 1913 was estimated at 1,500.

tion of root crops, especially sugar-beets. All these workers are classed as casual. Their ratio to the permanent workers has not varied to any extent in recent years. The agriculture of this region is characterised by the relation which exists between agriculture and industry, as many agricultural labourers work occasionally in the many sugar and starch factories and in the distilleries, while on the other hand many factory workers take part in the harvesting.

In western Sweden, conditions vary much from district to district. In some districts we find practically only small farms cultivated by their owners ; while in others, in which medium and large-sized farms are the rule, hired labour consists for the most part of unmarried farm-servants who live and board with their masters, and of married *statare*. Here also *torpare* are found, though their numbers are declining, and also day-labourers. The proportion of the several groups of workers in the total is approximately as follows: farm-servants 35 per cent., *statare* 35 per cent., *torpare* 20 per cent., day-labourers 6 per cent., seasonal workers 4 per cent.

No notable variation in the ratio between permanent and casual workers has been noted in recent years. The farm-servant, when he establishes a household of his own, generally passes into the class of *torpare*. The transfer from field to factory work and *vice-versa* is fairly common.

Northern Sweden differs from the other regions in the almost total absence of *statare* and the small number of *torpare*. The prevailing type of agricultural labourer is the farm-servant living with his employer: and on farms where there are saw-mills we find day-labourers, paid by the day or hour like factory hands. A considerable number of seasonal workers immigrate from Norway and Finland. Farm-servants are considered as continuous workers, day-labourers as continuous or casual according to the length of time for which they are engaged. Here too we find the number of casual labourers on the increase as compared with the continuous workers, and the actual numbers for both classes is declining. Passage from one class into another is rare.

§ 3. Terms of employment and rules which regulate the engagement of agricultural workers.

With the abolition of compulsory personal service the only form of employment which exists in Sweden is that based on free contract.

As regards terms of employment, the workers may be classified under three heads : farm-servants engaged under the provisions of the Act of 1833 still in force (*lagstadda tjänare* including the so-called *statare*), *torpare*, and day-labourers and others engaged upon the same terms as industrial workers.

For the first group the Act provides that in the absence of other agreements, service is understood to begin on the 24th of October, to last for one year, and to be renewable from year to year. The employer can have a servant brought back by the police if he leaves his service before the expir-

ation of his time ; but he is bound to provide him with proper board and lodging, to look after him when ill, and to support him, if, after serving faithfully and uninterruptedly from the age of 30, he is incapacitated by age for work. The engagement is generally verbal.

The *torpare* under the law of 1907 are classed as tenants, and the terms of their engagement are generally in writing. The grant made them is for a fixed period (not exceeding 50 years) or for the life of the grantee ; when no period is stated it is understood to be for five years. The rent must be stated in terms of cash, even if it be paid in kind or by personal services. The *torpare* is not, as a rule, entitled to compensation for any improvements he may make on the *torp*.

No special legislative measures regulate the status of day-labourers.

The enquiry secured complete data for farm-servants only. The information is summarised in the following table according to the principal forms of contract.

	Engagement regulated by —				
	The Act of 1833	The Act, supplemented by a written agreement	The so-called personal contract	Other forms	Total
Number	1,474	270	212	14	1,970
Percentage	74.8	13.7	10.8	0.7	100

This table shows that approximately three-fourths of the married and unmarried farm-servants are engaged under the terms of the Act of 1833 pure and simple, and this holds good more especially for small and medium-sized farms ; but on large farms a growing need is felt to modify the now antiquated provisions of the Act by special written agreements which specify the wages to be paid and certain other conditions of employment. In the case of the so-called " personal contracts " the rights and duties of the servant are set forth in detail with much care and accuracy.

As far back as the spring of 1907 agricultural labourers were engaged under collective contracts, but only in those districts in which the agricultural and industrial population live side by side. In January, 1909, 35 such collective agreements were in force, regulating the relations between 92 employers and 2,095 labourers ; but from that time their number has declined rapidly, and at the beginning of 1914 it had fallen to 5.

Casual day-labourers are, as a rule, engaged by verbal contract, but when they are considered permanent employees they are engaged in writing for the period determined on. In the case of men engaged on root crops (more especially beets), written agreements are common, and this form of engagement is almost exclusively used in the case of immigrant workers.

For these latter two different forms of contract are in use, the one for Swedish, the other for foreign labourers.

Employers in some districts are in the habit of keeping back part of the wages of farm-servants as security against their leaving before the expiration of their term of service. (1) Day-labourers are paid at the end of the week ; in the case of certain special kinds of work it is customary to hold back part of the wages which are paid when the work is finished. This is known as the discount system.

The contract with the *torpare* is generally a written one ; in many localities the old form of the *torp* contract is still in use, setting out in detail the rights and duties of the *torpare*.

§ 4. Overtime in farm work.

Information as to the regular hours of work on the farm is given in the annual statistics already mentioned. The enquiry has added some supplementary information on overtime. As a rule, overtime, paid for separately, is unknown on small farms. When urgent work, performed during additional hours, has to be paid for, it is usual to give special hours of leave to the workers, or to recompense them by gifts in kind or cash. It has, however, gradually become customary in certain districts to pay a fixed rate of wages for work carried out before or after the usual working hours on week-days, or on Sundays or holidays.

The following table shows the rate of payment in such cases according to data supplied by the mayors :

No. of communes which supplied information.	Communes in which overtime is paid for in cash		Wage-rate per hour of overtime on week days (öre) (1)		
	Number	Percentage	Maximum	Minimum	Average
2,275	626	27.5	75	15	33

(1) An öre is the hundredth part of a crown, which is worth about fr. 1.36.

Cash payments for overtime are more common in eastern Sweden (50 per cent. of the communes) and least common in Småland and the Islands where small holdings are the rule (10.6 per cent.). In any case overtime is quite the exception in Sweden and is usually performed on

(1) The Act of 1833 entitles employers to hold back the whole salary until the end of the year of service.

week-days, in the evening or at night, and very rarely on Sundays or holidays.

Payment by the hour for overtime to capable male workers varies from 15 to 75 öre; the average is 33 öre. Sometimes payment takes the form of a fixed percentage of the normal wage, for instance from 25 to 100 per cent.

Sunday or holiday work is generally paid for at higher rates than overtime performed in the evening or at night on week-days.

§ 5. Piece-work and the bonus system in agriculture.

The time-wage is general in nearly all parts of the country. Nevertheless it has been noted that in agriculture, as in manufactures, wages which take into account not only the number of hours worked but also the amount of work performed during a given period tend to increase the output and the industry of the labourer. Such wages are of various kinds. There is, for instance, a form of payment which is a compromise between time-wages and piece work, namely task-wages (*à forfait*), under which system the labourer engages to perform a given amount of work in a day; when it is accomplished his time is his own, or he is paid extra for any work he may do in the remaining hours.

Then there is piece-work, which, as a rule, is performed only by day or casual labourers, and which applies only to work of a kind such as would be paid for by unit of goods produced in a factory.

Piece-work is very prevalent in forestry, and takes the form both of individual engagements and collective labour contracts; but this latter form is less frequently met with in agriculture than in manufactures. The average daily earnings of the piece-worker vary greatly in different localities and according to the nature of the work performed. For instance, a very common task in the country, and one which is nearly always paid by the piece, is the digging of ditches for draining off surface water; the average daily wage for such work is reckoned at from 3.23 to 3.92 crowns. Workers engaged in reclaiming marsh lands earn from 3.25 to 4.11 crowns a day. Workers engaged in the cultivation of sugar-beets and other root crops are almost always piece-workers, and the women and children of permanent workers are employed in this work. It is calculated that women earn about 2.63 to 3.75 crowns a day at this work; men, when they chance to be employed on the beet harvest, earn an average wage of 3.88 crowns a day. The wages of foreign workers are much lower. For lifting potatoes they are paid on an average 17 öre per hectolitre.

In some places the payment of piece-work takes the form of a fixed share in the crop; thus in the district of Norrbotten workers receive in payment one-half of the hay stacked in the barns. Piece-work payment is also usual on stock farms; milkers are generally paid half an öre per litre or kilogramme of milk.

Opinions differ as to the advantages of piece-work in agriculture. All agree however, that as a rule the labourer earns from 20 to 30, and sometimes even as much as 100 per cent. more than when paid time-wages. The system is nevertheless viewed with disfavour by the employers who fear that the work will be carried out hastily and unsatisfactorily, and by the labourers who consider that it taxes their strength unduly. Piece-work in any case only exists on a limited scale in agriculture, as it can only be applied to those tasks which can be controlled, and, if necessary, done over again.

There is more likelihood that the bonus system or profit-sharing will find increasing favour in agriculture. This usually takes the form of a share in the gross output, as in farming even more than in manufactures, it is difficult to determine the net annual profits,

This system is adopted especially in the breeding of milch cows, and takes the form either of a bonus varying with the actual total quantity of milk obtained, or of a share in the quantity obtained over and above a certain fixed minimum. The bonus is given either to the manager only or to the whole staff proportionately to the work performed. So as to avoid the danger that the men, under this system, should devote their attention exclusively to the output of milk, neglecting other branches of breeding, many employers are in the habit of giving a gratuity for every calf or pig bred which lives for a certain length of time.

The bonus system is little in use except on dairy farms, and when it is found elsewhere it is restricted exclusively to the managing staff.

The following table shows a few typical cases of the bonus system or of profit-sharing, selected from replies received from various districts.

Province	Participant	Bonus
Upsala	Farm-manager	0.4 % of the gross product of the farm.
Örebro	Farm manager	3 to 4 öre per hectolitre of full-eared grain.
Södermanland	Dairy-manager	4 öre per 100 litres of milk produced, and 50 öre for every calf bred.
Kalmar	Cowkeeper	5 öre per hectolitre of milk sold.
Blekinge	Cowkeeper	Wages 50 crowns per annum, plus 2 % on the value of the milk sold, and 1 crown per calf.
Stockholm	Market-gardner	2 to 5 % of the value of the produce sold.

§ 6. Wages in kind in agriculture

While payment in kind has almost disappeared in the manufacturing industries, it is still very common on the farm, especially in the form of

food-stuffs, fuel, etc. especially when the labourer is an unmarried farm-servant who boards and lodges with his employer, or a *statare*, half of whose wages consist in board and lodging, or a *torpare*, whose wages as we have said, consist from of old in his right to farm a piece of land, to graze his stock, to gather wood, etc. We thus see that it is only the day-labourers and the immigrants who are paid exclusively in cash. But even of these, the former often receive part of their wage in kind, in the shape of lodging, or a garden or the right to use grazing land, and in southern Sweden immigrant labourers generally receive lodging, fuel, milk, potatoes, and other food rations.

The enquiry tried to find out whether the system of payment in kind was considered advantageous, or whether there was a tendency to replace it by cash payments. The information received from 1,018 mayors deals almost exclusively with the class of farm-servants, and shows that on large estates there is a slight tendency to pay them a fixed amount in lieu of board and lodging.

In the case of the *statare* two tendencies exist, one favourable the other unfavourable to this mixed wage. A third intermediate opinion favours the transformation of the system by accepting certain reforms which the agricultural labourers ask for. Meantime there is a marked tendency to reduce the quantity of goods given to the worker, either by enabling him to produce them himself, as, for instance, by assigning him land to till, or by paying him the value of the goods in cash, though the labourer is often given the choice of payment in kind or cash according to his convenience.

§ 7. Grants of land to agricultural labourers.

The most effective means of combating the wide-spread and dangerous phenomenon of urbanism is that of transforming the large number of landless farm-workers, and, generally speaking, the unsettled population, into peasant proprietors, or at least into small holders, by means of the so-called labourers' settlements. The question is one of great importance in Sweden where the scarcity of labour is beginning to be seriously felt in many districts.

The enquiry wished to ascertain if and where the need was felt of giving land to agricultural labourers, and what steps had been taken towards this end and with what results.

Although the majority of the replies received were from large landowners and large farmers, they were unanimous in considering that the ancient *torp* system cannot provide the remedy. Although in some regions, such as Småland, Blekinge, Halland, and elsewhere, it frequently happens that a young farm labourer, wishing to form a family, takes a *torp*, yet, in the great majority of places, landlords complain of the difficulty of finding *torpare*, that is to say, peasants willing to occupy a *torp*. In northern Sweden, however, where the land is granted in perpetuity, the *torp* system is popular with the peasantry.

Ever since 1891 in the district of Norrbotten, and since 1904 in that of

Västerbotten, grants of land under the *torp* system have been made on Crown forest lands; and a Royal Decree of June 18th, 1909 (amended in 1913) authorises the grant of these lands for a period of 50 years. In 1912, 843 grants of forest land and 341 of fallow land had been made.

All this shows clearly that the Swedish peasant of our day, unlike his forebears, is not satisfied with the *torp* system which, if it provided in the past a stable and capable peasantry, no longer complies with the economic requirements of modern life. Would it be possible to modernise this system by means of intelligent legislation and better technical training? The enquiry fails to answer this query.

The replies received indicate considerable interest in the problem of forming a new class of labourers who would combine the stability and relative economic independence of the the *torpare* with the *statare's* ability to provide what is so necessary in modern farming, a labour force always ready to meet the requirements of the landowner. Many believe that this combination would be secured by granting the *statare* and the day-labourer a house to live in, with a certain amount of arable and grazing land.

Efforts in this direction have been made in Västmanland, in Södermanland, and in Blekinge, on varying scales with favourable results.

The evidence shows that intelligent and hardworking peasants strive to become owners and to enlarge their farms until their holdings supply all the needs of their families without their having to hire themselves out to work for others.

To meet this need the State has devoted considerable sums, since 1904, in the form of loans on favourable terms, availing itself of the services of existing agricultural societies and of small holdings' associations constituted *ad hoc*.

From 1905 to 1911, 6,237 agricultural loans had been made amounting in all to 17.2 million crowns, of which 5,909 for 15.9 million crowns through the medium of the agricultural societies, and 328 for 1.3 million crowns through the medium of the special associations. The size of the small holdings formed by the agricultural societies was as follows: 34.5 % less than 2 hectares; 62.6 % from 2 to 10 hectares; 2.9 % over 10 hectares. For those formed by the special associations the figures were 37.4, 60.7, and 1.9 per cent. respectively.

The enquiry indicates that, apart from the efforts made by Government, many large estates throughout Sweden have been sold in small lots varying from half a hectare to 10 hectares to landless peasants, industrial workers, servants, etc., the prices varying according to the quality of the land and the locality in which it is situated. On all hands a growing desire is noted on the part of the peasant to own sufficient land for the support of himself and his family. This movement has been greatly encouraged by the associations for promoting small holdings which have been formed of recent years. Hitherto the main obstacle to success has been the high price of land and the lack of capital on the part of the agricultural labourers.

(To be continued).

MISCELLANEOUS INFORMATION RELATING TO AGRICULTURAL ECONOMY IN GENERAL IN VARIOUS COUNTRIES.

CANADA.

THE APPOINTMENT OF AN AGRICULTURAL INVESTIGATION COMMISSION. — *The Agricultural Gazette of Canada*, November, 1915.

A Report of the Committee of the Privy Council approved by the Governor-General on 28th. June, 1915, provides for the appointment of a Commission for the purpose of making "careful and exhaustive enquiry" into a number of matters affecting the development of agriculture in the Dominion. The Report, after referring to the necessity of stimulating greater production, and especially agricultural production, in Canada, calls attention to the importance of (1) improving methods of agriculture, (2) contributing to such improvement by proper instruction and demonstration, (3) increasing the acreage devoted to production, (4) attracting immigrants of a suitable type in order to ensure a large and permanent agricultural population, (5) encouraging co-operation among producers, and (6) providing cold storage and abattoir facilities. These are the questions directly relating to agriculture which are submitted to the Commission for investigation; but the Report goes on to enumerate other subjects which call for enquiry because of their bearing upon the prosperity of agriculture and the general welfare of Canada. These are (*a*) the distribution of products in the home market and the transport of Canadian products to foreign markets, (*b*) the encouragement of industries subsidiary to agriculture which can be carried on successfully in the Dominion, (*c*) the problem of the concentration in towns of immigrants who would be more regularly and more profitably employed in agriculture, (*d*) the question of finding employment for ex-service men who may return or emigrate to Canada at the end of the war, (*e*) the construction of branch lines of railway into newly-developed districts.

The appointment of the Commission was approved on the date mentioned — 28th. June 1915 — but owing to the absence of the Prime Minister, who had to spend some time in England, its constitution was not approved till the 19th. October, 1915. As then appointed it consists of nine members with the Hon. James A. Lougheed as Chairman. Mr. W. J. Black (Winnipeg) acts as Secretary.

The Commission is appointed during pleasure, and is authorised to delegate particular questions to one or more sub-committees of its members, and to make interim reports from time to time as the Commission itself shall determine.

FRANCE.

THE AGRICULTURAL LABOUR QUESTION. — THEBAULT (Eugène) in *Le Temps*, November 27th., 1915.

M. Eugène Thebault, of the editorial staff of the *Temps*, recently travelled through five Departments of the south-west of France — Vienne, Deux-Sèvres, Vendée, Charente-Inférieure and Gironde — in order to study, in the districts farthest from the war-front, the working of community institutions especially in connection with agricultural labour. In the course of his enquires he interviewed not only officials but especially the cultivators themselves, questioning them particularly as to the demand for labour. We may give here a summary of his conclusions.

The shortage of agricultural labour is general, and yet the work has been satisfactorily accomplished.

In Deux-Sèvres agriculture has been brought to the highest degree of intensity. The breeding of cattle and the cultivation of cereals are there of equal importance. The sale of eggs, milk, and butter is organised by flourishing co-operative societies. To these must be added special industries, — the rearing of mules, particularly of female mules, which are exported to the United States and to the Argentine, and the distilling of alcohol from beet-root or from grain in the *districts* of Niort and of Melle. We may add the breeding of horses (districts of the Marais and of La Plaine) and of draught oxen and beef cattle (Parthenay and de Bressuire). It will be seen that there is a connection among the different kinds of agricultural work in Deux-Sèvres and that the best labourers, numerous and experienced, and guided by good traditions, are there absolutely necessary. Following mobilisation such labourers were no longer available. What was the consequence ?

In 1913 the cultivators of Deux-Sèvres had sown 121,000 hectares of wheat, 11,000 hectares of barley and 61,000 of oats. In 1914 the same figures held good, and these are in fact the areas of cereals generally sown in this district. In 1915 there were 120,000 hectares of wheat instead of 121,000, and 60,000 hectares of oats instead of 61,000. The winter and spring sowings of barley covered nearly the same area as in 1913.

The 2,000 hectares not sown with wheat and oats are not all in the same district, nor have they been left uncultivated. They are in plots outside the cultivated portion of each farm or turned into pasture. On the whole, for 1916 there are hopes of a better crop than in the preceding year. The wheat crop in 1913 yielded 17 hectolitres per hectare ; in 1914 the yield was 16 hectolitres, weighing 76 kgms. per hectolitre as in 1913. In 1915 the

return was much lower, being only 13 hectolitres per hectare, owing to the continual rains of the end of spring and in summer.

In the Gironde and in Charente Inférieure M. Eugène Thebault noted a decided advance due to the fine weather in the latter half of October. The only work in arrear was in the marshes of Deux-Sèvres and La Vendée, of which the interminable drainage had been begun long before the war. In those districts of Melle where a distillery is working, the sowing was scarcely finished. The beet-root had been gathered and the potatoes were stored. Women, children and old men shared in the necessary work with equal zest. The older people were a little fatigued but their zeal was unabated.

The distillery of Melle which had utilised about 10,000 tons of beet-root in 1913 and 19,000 in 1914, only crushed 5,000 tons in 1915. But it received 13,000 tons of grain and its production of alcohol was thus somewhat increased.

In Vienne the conditions were very similar. The district of Loudun was put to the proof for the vintage was poor, owing to unfavourable weather, but a sufficient supply of labour was ensured in case of necessity. In the *arrondissement* of Montmorillon some farms on shares were given up, the women who owned them having sold their stock on satisfactory terms, thus avoiding the difficulties of management which they feared to meet.

In La Vendée the Prefect left to the communes the duty of nominating commissions of five members to initiate plans for the cultivation of fallow lands. But even before this precaution was taken it was manifest that this work was already in progress. The most pressing need was met by the efforts of men not mobilised, and in all Poitou the only symptom of a shortage of labour was the demands of the day labourers. In Vendée even without the justification of special training they ask five francs a day and their food. In Deux-Sèvres, men engaged for the hard work of haymaking and reaping expect from 100 to 150 francs per month. In the Charentes the rate of wages is almost the same. In Gironde labour is apparently cheaper, — from 5 francs to 5 frs. 50 during the summer, and from 3 to 5 francs in winter. But these wages are supplemented by two litres of wine per man, and in certain communes of the Gironde it is usual to board agricultural labourers at least in part.

The rates are thus very high. The demand exceeds the supply and the farmers have not at their disposal one half of their ordinary staff. It has therefore been found necessary everywhere to grant temporary exemptions from service (generally one for each canton) to smiths, carpenters, those who undertake thrashing, proprietors of agricultural machines and mechanics. It was also necessary to form gangs of military workmen brought from the depots, and in Charente-Inférieure especially to send for skilled workmen to be employed together with those who had escaped from the invaded districts. Temporary exemptions have also been granted to those who work in forests, because in the forests belonging to the State there were no auctions in 1914, and the stocks of wood were nearly exhausted just at the time when the railway lines were occupied, while owing to the bad

state of the roads not even the carriage of charcoal could be accomplished. It must also be observed that available labour is attracted towards urban centres. The ports of Charente (La Rochelle, La Palisse, Tonnay-Charente etc.) have doubled their traffic. Fontenay-le-Comte, Niort and Poitiers manifest unusual commercial activity, because many foreigners from neutral countries come to buy fruit, vegetables and clover seed wholesale. This last was sold at the rate of 170 francs for 100 kgs. at the great clover market held at Poitiers on October 18th. The population in country districts tends still more to diminish, and that of towns to increase, but imperatively necessary labour is none the less performed.

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THE ORGANISED CONSTITUTION OF THE NATIONAL AGRICULTURAL LABOUR OFFICE.

In the *Bulletin* for July, 1915 (p. 120) we described the establishment of this Office and its first results. The Government, desirous of giving it a recognised position and legal status, introduced a Bill in the Chamber with the object of making the Office a body corporate and giving it financial autonomy.

The objects of the Office were declared to be (1) to determine the best means of developing agricultural labour and improving the condition of the labourer, (2) to organise a central registration office for offers of and requests for agricultural labour, and to put at the disposal of all interested persons information of every kind relating to agricultural labour, and (3) to take measures to perfect the recruiting and distribution of agricultural labourers, whether French, colonial or foreign.

The argument for the introduction of the Bill was as follows. Instead of the proposed office an association might have been formed composed of representatives of the large agricultural societies, — an association which might be considered, therefore, to be one of great public utility. Such an association would have the incontestable advantage of rendering unnecessary the creation of a new service and avoiding the expense of a certain number of officials. It would, besides, probably obtain much larger grants from those agricultural federations that would share in its foundation. Finally, the institution would have the flexibility which characterises institutions sprung from private initiative. But all these advantages would be outweighed by the serious disadvantage that the association would always preserve the character of a private enterprise. To accomplish its mission, it should keep up constant relations with various administrative services and public authorities, and in particular with the officials of the Ministries of Agriculture and Public Safety, with the great railways, and with the representatives of France in foreign countries. In this respect a private institution, whatever be the competence and authority of its directors, can never possess the same facilities, the same means of action, or the same standing, as a public institu-

tion. This observation applies more particularly to foreign labour for which the Office is connected not only with French authorities but also with foreign governments. It is therefore indispensable that the Office should have the form of a public department.

If attached to the central administration of the Ministry of Agriculture, it would completely lose the character of a private institution; but for some very forcible reasons, this idea had to be given up. In the first place, from a technical point of view, the Office, especially in its earlier days, would require an initiative and liberty of action not possessed by officers of a highly organised administration. And in its financial working it would meet with serious hindrances in the complicated nature of the rules which regulate contract and release from contract, the passing of orders to pay and actual payments, in connection with State expenses.

Finally, it is very clear that associations and private persons wishing to encourage the development of agricultural labour would be much less willing to extend their pecuniary and moral support to an Office which was merely the branch of a Ministry, than to one specially established.

An autonomous institution of which the aims and methods are well known receives help that no one would dream of placing at the disposal of the State itself. In short, it was seen that the Office should be a body corporate and should have financial autonomy, and these considerations led to the adoption of a type intermediate between the two forms described —that of a public establishment—a form frequently adopted by legislators and one for which the public authorities have shown in recent years a special predilection. Of this type are the National Tourist Office, established under the finance law of 8th. April, 1910, art. 123, the National Navigation Office established under the finance law of 27th. February, 1912, art. 67, the Colonial Office, established under a decree of 14th. March, 1899, and created a body corporate with financial autonomy by a law of 18th. February, 1904, the National Office of Foreign Commerce by the law of 4th. March, 1898, the Office of Foreign Legislation and International Law by the finance law of 26th. February, 1912, art. 36. The organisation and working of the Office would be regulated by a resolution of agreement between the Ministry of Agriculture and that of Finance. The Bill on which the Ministry of Agriculture decided may be analysed thus:

(a) *Organisation and Administration of the Office.*—The office shall be under the direction of a Council of Administration consisting of six members nominated by the Minister of Agriculture. The Council shall meet at least once a month, and meetings shall be called by the President more frequently if required by the needs of the service. Resolutions concerning the budget, accounts, markets, leases of an annual value exceeding 1,500 francs, alienation of movable property, acquisition and alienation of immovable property, shall be submitted to the Minister with the recommendations of the Labour Commission. Other subjects shall be decided by the Council. The work of the Office shall be carried out by a Director chosen by the Minister from among the members of the Agricultural Labour Commission. The Director shall carry out the decisions of the Council and be the

representative of the Office in legal affairs. He shall form part of the Council of Administration in a consultative capacity.

The Labour Commission shall give its opinions on the subjects above enumerated, and where necessary suggest improvements in working, and shall meet for these objects at least once in every three months. The administrative Council shall be required at the end of every year to issue a report of its work during the year, this report to be submitted to the Labour Commission, and by it transmitted with observations to the Minister of Agriculture.

(*b*) *Financial Regulations.* — The receipts of the Office shall consist of grants from Government and from the large agricultural associations, supplemented by the profit from the sale of publications, and, later on, perhaps by fees for registration.

The expenses of the Office consist in the salaries and allowances to the staff, the outlay for printing and office requirements, for heating, lighting and telephone, etc., for upkeep and repairs, and possibly for rent, unless the Office be permanently housed in a building belonging to the State.

The budget is to be drawn up by the Director, passed by the Council, and approved by the Minister upon the advice of the Labour Commission.

The Director shall meet expenses, pass orders to pay, and check all money received. Collections shall be made and expenses paid by a responsible agent appointed by the Minister of Agriculture with the approval of the Minister of Finance. The Director's accounts and those of the agent shall be presented to the Council of Administration and then submitted to the Labour Commission. The Director's accounts shall be passed by the Minister, those of the agent shall be audited by the Court of Accounts.

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A CURIOUS LAND TENURE EXPERIMENT. — *La Réforme Sociale*, October 1st.-16th., 1915.

At the annual meeting of the *Société d'Economie Sociale* of June 10th, 1915, M. Jacques Bertillon drew attention to the curious economic situation of the commune of Fort Mardyck, situated in a creek of the North Sea. "As soon as we approach this village," says the eminent authority on demographic matters, "we are struck by its peculiar appearance. It is formed of a series of small white houses, in the middle of small gardens, each 2,400 square metres in area. The houses are as clean inside as outside. The village is further characterized by the innumerable children, barefoot, as is proper in a sandy village, giving an idea of prosperity which is really pleasant to observe. The birth rate is 43 per thousand, as in Russia, but with the difference, that the mortality among the children is very small.

This village is explained by its history. Louis XIV won a victory here. A small fort, which gave its name to the place, Fort Mardyck, protected a creek frequented by pirates and had, it appears, a certain strategic import-

ance. It was decided to people this angle of the conquered country with families of real French origin. They were found in Picardy, in a village called Cucq. Four families were brought from there. They were given a large quite uncultivated area on the sole condition of their never selling or dividing it.

Such was the foundation of this commune. These peasants, these fisherfolk, set their minds to work. They did not know very well what to do with the land and empirically they worked out the extraordinary constitution of which we shall now give the details.

Every individual born in the commune, on marrying, receives for his life-time a piece of land of 2,400 metres, which at his death returns to the commune. The important point is that the grant is only for life; so that these people have no anxiety for their children. They have not to establish their eldest son or to watch over the future of all their children; they know that, however many they are, each will have his grant of 2,400 metres.

"Two thousand four hundred metres is not much, if the land is uncultivated. But by their labour they have made the soil productive. They cultivate vegetables of every kind. They are not wealthy, but their living is assured. To-day there are 2,000 of them. Really the population has increased to a greater extent, but, as the men are sailors, they go to Dunkirk, leave for some part of the world, and renounce the little benefit they might have if they had married in the commune.

"These people marry very young; they have many children and lose very few. Illegitimate births are unknown or nearly so. Let us also say that poverty is unknown and even impossible."

FRENCH COLONIES.

THE LAND QUESTION IN FRENCH WEST AFRICA.

By a letter of the 23rd October, 1915, addressed to the President of the Court of Appeal of Dakar, the Governor-General of French West Africa appointed: (1) a Commission for the study of questions concerning the tenure of native property in land, collective and individual, (2) a permanent Consultative Committee for questions arising from various native customs.

The publications on the native customs of French West Africa with regard to landed property lead to the conclusion that the tenure is neither individual nor alienable. It is not property according to European ideas; it is a permanent right, perhaps even more, vested in individuals and remaining in the family out of which it can never pass. The land is to some extent family property held by the natives by hereditary traditional and collective right, but without title-deed. Private property in land as we conceive it with the right of disposal and sale is absolutely unknown to the natives.

This fact could not but be respected by the Government; and the legislature in the decree of the 23rd October, 1904 (art. 10) recognised "the collective property of the natives;" further the collective right has been given special protection by enacting that the native chiefs, acting as representatives of the community, cannot make contracts of alienation or of letting with individuals, without the consent of the Lieutenant-Governor, their natural guardian, in the form of a decree of the Council of Administration. But collective ownership must change and disappear with the evolution of the people, giving place to individual and inalienable ownership.

In French West Africa division of property by families and sometimes by individuals is making some progress especially where relations between natives and Europeans are close. Natives who have held property clearly by individual right, when they free themselves from the bonds of collective ownership and of native customs, ought to be able to claim the protection of the law and the full rights conferred by it. This individual ownership should be progressively obtainable without hindrance for each holding at the time chosen by the native himself, as soon as he is sufficiently familiar with the ideas and institutions of the mother country to be in a position to claim its benefits. The legislator by the provisions of articles 58, 65, and 5 of the law of 24th July, 1906, has facilitated the last stage of the transition to private ownership for the natives by authorising them to change their right of occupation into a right of ownership in the sense of French law.

It was necessary on the other hand to separate the land which must be placed at the disposal of the natives from that required for the work of colonisation by the State, which cannot claim ownership of all the land, although, according to most of the treaties made with the chiefs of the country, the territory is ceded to France in "full ownership."

The decree of the 23rd October, 1904, already referred to, while assigning to the State "lands which are unoccupied and without owner" in conformity with the laws of the mother country, has decided this last point. It might seem that these provisions were of a nature to safeguard the respective rights of the natives and of the State and to offer for every difficulty an equitable solution. But this is not so.

No definition is given of "lands which are unoccupied and without owner;" and the native land tenure, excluding the idea of a master or proprietor in the sense of the French civil code, while extending even to lands that seem to be waste and unprofitable (in the form of rights of commonage or of a reserve for the benefit of a chief who represents the community) has led in practice to conflits of right. Another point is that the fact of the natives having only precarious rights over the land has led some people to conclude that the complete ownership of land resides in the State.

Doubtless the object of the law of the 24th July, 1906, was to permit the formation of private property among natives in places where something of the kind already existed with characteristics sufficiently marked to obtain the stamp of French ownership, and the guarantee of registration. But articles 58 and 65 of this law which must read with art. 73 are

drawn up in such terms that they give no right of private ownership to the native even though he have fulfilled the required conditions, but merely a concession through the liberality of the State. The certificate stating the conditions of the tenure desired by the native is granted by the representative of the Administration who is himself the judge of the desirability of the concession.

The decrees of the Court of Appeal of Dakar of the 8th February and 1st. March, 1907, and later that of the 16th. July, 1915, on the common land of Rufisque, mark the conclusion of the conflict by sanctioning the absolute right of ownership of the State to the whole of the land, in its quality of regular successor of the native chiefs, either by territorial cession, or by conquest.

The Governor-General considers that this situation ought to be ended by a legislative measure specifying:

(1) The limits of the State property, by a definition adapted to the country, of the phrase "lands which are unoccupied and without owner;" (2) the formal right of a native who desires private ownership under French law, and who fulfils the required conditions.

The question of collective native ownership remains to be examined. Collective ownership, vestiges of which still exist in advanced civilisations or appear in certain rights, must be maintained, especially in French West Africa where communities draw their existence from the soil on which they are settled, but it should be so regulated that each village might, collectively and in accordance with its own customs, enjoy a certain patrimony proportioned to its importance, without danger of being deprived of it. The right of sale, entirely opposed to native tradition and profitable only to speculators, ought to be explicitly denied. The right of letting on lease might perhaps be tolerated, but only where it agrees with local customs. In short every village should be endowed with collective property, the enjoyment of which should be regulated and the integrity guaranteed, so that the property might serve the purpose for which it was intended, namely, to form a land reserve for the natives. With this object a law should be passed modifying that of 23rd. October, 1904, and authorising the Governor-General to fix the extent and the limits of collective territories by a decree drawn up on the proposal of the Lieutenant-Governors. French West Africa is large enough and its population scattered enough for the formation of collective property for the villages, without trespassing on the domain of the State. This latter must be of considerable extent to allow of concessions, and to ensure the work of colonisation in its different aspects, while leaving free scope for private initiative among natives who may wish to exchange the incomplete and precarious rights recognised by their own land customs for French right of ownership. For the examination of these questions the Governor-General has decided to appoint a technical commission under the President of the Court of Appeal of Daker. This Commission will also draw up proposals with regard to the revision of those provisions of the land law of 24th. July, 1906, which may have been found insufficient or defective either from a legal point of view or through experience of their working.

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AGRICULTURAL LABOUR IN NEW CALEDONIA. — *La Revue agricole*, the organ of the Chamber of Agriculture of New Caledonia, April-May-June, 1915.

The native New Caledonian is not generally a good agricultural labourer; profitably employed at the time of gathering the coffee and cotton crops, and in the preparation of copra. Some of the natives are highly esteemed for the care and management of cattle.

During the last few years, the Javanese have been principally in demand among agriculturists. The cost of employing these labourers is considerable. First there is the expense of recruiting in Java then of the journey from Batavia to Noumea and back, representing an outlay of from 500 to 600 francs for three years, the duration of the labour contract. The monthly wages vary from 25 to 30 francs, and the cost of maintenance is about 20 francs. It may therefore be estimated that a Javanese labourer costs his employer about 65 francs per month, that is, about 2 fr. 50 per day of actual labour, — a large sum considering the modest results produced by these labourers, but the Javanese is docile and likes agricultural work, so that the farmers are satisfied.

PARAGUAY.

PRIVATE AGRICULTURAL COLONISATION IN PARAGUAY. — Mensaje de P. E. de 3 de abril de 1915, cometiendo a la consideración del Congreso Nacional un proyecto de ley que l'autoriza a firmar un contracto de colonización con los señores José Grassi y Olinto M. Martinoli. — *El Diario*, Asunción, July 15th., 17th., 28th. and 30th. and August 2nd., 1915. — *La Reacción*, Asunción, June 9th. and 25th., 1915. — *El Liberal*, Asunción, June 11th., July 8th. and 25th., August 2nd. and 13th. — *La Patria degli italiani*, Buenos Aires, August 22nd., 1915.

On the 3rd of May 1915, the Parliament of the Republic of Paraguay passed a law authorising the Executive to sign a contract with Messrs. José Grassi and Olinto M. Martinoli for colonisation, and conceding to them 25,000 hectares of State land.

This measure is an indication that the Government of Paraguay considers the system of rural colonisation by private enterprise more advantageous than that of official colonisation, and this conviction, the result of experience, reflects the sentiments of the industrial and rural circles of the country as well as those of its most eminent citizens. In fact the best developed of the colonies of Paraguay are the colonies of Elisa and Hohenau both founded by private persons, the latter, receiving a grant from the State of 16 leagues of land in Upper Paraguay, free of any obligation except that of establishing thirty families on every league granted.

Doctor Eduardo Accevedo in his book *Economia Politica y Finanzas* thus summarises the opinion of the agricultural classes: "In the districts

of Rio de la Plata immigration and colonisation undertaken by public authorities have been deplorable in their results, while those under private persons have made considerable progress which must certainly increase as time goes on."

The basis of the contract between the Paraguay Government and Messrs. Grassi and Martinoli is as follows:

The State lands conceded comprise the unenclosed land of the "Colony of the 25th. of November" and the lands of Urmendiy (Department of San Joaquín) both districts being situated in the central part of the country, a little towards the south. To these are added two tracts of forest, in order that the colonists may have wood for building and fencing. The following obligations are imposed on the grantees:

(1) To bring from abroad a sufficient number of families to people and cultivate the lands, each of these families being given a holding of from 25 to 300 hectares according to the state of the land and the financial resources of each family.

(2) To till and sow from 500 to 1,000 hectares in the three first years (If during this period the grantees have not been able to bring the necessary number of families into the country they must carry out the work at their own expense, gradually increasing the area cultivated, so that by the but he is nevertheless tenth year, one third at least of the land shall be under cultivation).

(3) To establish experimental plots for the cultivation of textile and fodder plants and of cereals.

The grantees on the other hand, will enjoy the following privileges:

(1) gratuitous travelling for immigrants, and carriage, likewise gratuitous, for their equipment, implements, agricultural machines and the cattle strictly necessary for the work of the fields from any of the ports of Rio de la Plata, always on the condition that the colonisation Society pay the full amount if the immigrant does not settle permanently in the colony;

(2) Exemption from customs duty or any other duty on machines for the use of the colony entering the country;

(3) Gratuitous and perpetual use for irrigation of all the water existing on the land granted, subject to the riparian rights of other persons;

(4) Use during the first ten years of the wood on the land;

(5) Exemption from payment of national taxes during the same period for industrial and commercial establishments in the colonies, excepting those for the sale of alcoholic beverages;

(6) Exemption from payment of export duties on the produce of the colony during the first ten years.

The grantees are also authorised to construct branch railways to connect the lands granted with any station of the Central Railway of Paraguay, or a navigable water-way, without prejudice, of course, to rights acquired under previous concessions.

The contract in question specifies that at the expiration of the tenth year if the grantees have satisfactorily fulfilled the obligations incumbent upon them, the State will give them possession of the land at the rate of 5 pesos

in gold per hectare, payable in five annual instalments no interest being charged. If the payment be made in one sum a discount of 15 per cent. on the total price will be allowed. Finally the Government of the new colony will be administered by the grantees under the superintendence of the Ministry of Fomento.

The impression produced by this contract on the rural classes of the country and on public opinion in general has been extremely favourable, seeing that this work of colonisation will render profitable lands hitherto unproductive. Great hopes are entertained as to the result of this undertaking in consideration of the competence and experience of M. Grassi in matters of colonisation.

M. Grassi has indeed had a brilliant career in colonisation. Thirty-two years ago he came before the public as administrator of a group of rural colonies in the province of Santa Fé (Argentine Republic). Then he became an independent coloniser, and founded numerous colonies in the Argentine Republic. Of these we may mention Uturraspe with 7,500 hectares, Estacion Larrudé representing a total of 45,000 hectares; Metileo and l'Italia, each with 15,000 hectares, Santa Lucia with 35,000 hectares and several others. In almost every case, excellent results have followed. It is estimated that M. Grassi either alone or with associates has colonised about 170,000 hectares in the Argentine Republic, and according to his declarations in the daily press of Ascencion he intends to carry on the same work in Paraguay, planting on the lands granted families of skilled agriculturists drawn from the different colonies founded by him in the Argentine. He intends also to being with them Italians, familiar the cultivation of rice, which will form with wheat the two chief products of the new colony.

RUGGERI ALFREDO, gerente responsabile.

INTERNATIONAL INSTITUTE OF AGRICULTURE
BUREAU OF ECONOMIC AND SOCIAL INTELLIGENCE

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Part I: Co-operation and Association

BELGIUM.

SOME DATA CONCERNING TRADE UNIONS AND CO-OPERATIVE AND MUTUAL SOCIETIES.

SOURCES (OFFICIAL) :

RAPPORT RELATIF À L'EXÉCUTION DE LA LOI 31 MARS 1898 SUR LES UNIONS PROFESSIONNELLES PENDANT LES ANNÉES 1908-10 (*Report on the Working of the Law of March 31st., 1898, on Trade Unions*) Presented to the Legislative Chambers by the Minister of Industry and Labour. Kingdom of Belgium : Ministry of Industry and Labour. Office of Social Insurance and Thrift. Brussels, 1914 : Dewit.

EXPOSÉ STATISTIQUE DE LA SITUATION DES ASSOCIATIONS D'INTÉRÊT AGRICOLE PENDANT L'ANNÉE 1911 (*Statistical statement of the position of the associations of agricultural character during the year* 1911). Ministry of Agriculture and Public Works : Agricultural Branch. Brussels, 1913 : Odry-Mommens.

ANNUAIRE STATISTIQUE DE LA BELGIQUE ET DU CONGO BELGE, 44e ANNÉE, 1913 (*Statistical Year-book of Belgium and of the Belgian Congo, 44th. Year,* 1913). Brussels, 1914 : A. Lesigne.

The movement for the promotion of association among agriculturists did not begin in Belgium until about 1890, much later than in many other states; but, on the other hand, being actively seconded by the Government, favoured by the conditions of the country and by the character of the people, it soon attained to a high state of development making itself felt in a manner altogether remarkable in every branch of economic activity.

There are in Belgium two fundamental types of association, one for the protection of trade interests (trade unions), the other strictly economic (co-operative and mutual societies). We have already carefully considered both these types at various times in special articles in this *Review*. We shall now confine ourselves to giving some data concerning the develop-

ment of these societies of recent years, which we have extracted from the "Annuaire Statistique" of Belgium for 1913, and from other recent official publications.

§ 1. Trade unions.

According to the Law of the March 31st., 1898, which determines its legal constitution, the Belgian trade union is an association "formed exclusively for the study, protection and development of trade or professional interests of all persons carrying on, in industry, commerce, agriculture, or the liberal professions, either the same profession or kindred professions, or the same trade or trades for the manufacture of the same products." But the association itself may not carry on any profession or trade. It is, however, authorised, under condition of not drawing any profit therefrom, to carry on certain transactions calculated to favour the commerce and industry of its own members, such as:

(*a*) the purchase and sale of all articles necessary in workshops for the use of apprentices belonging to the union; (*b*) the purchase, for resale to members, of articles necessary for the exercise of their trade and the sale the products of the work of members, (*c*) the purchase of livestock, machinery and implements, to remain the property of the union, and to be used by its members in the exercise of their occupation.

To enable the unions the better to attain their aims, they are empowered to take measures connected with their trade or profession, such as the establishment of classes for study, museums, libraries, technical schools, agricultural experiment stations, analytical and experimental laboratories, and exhibitions with prizes.

Federations of unions may obtain recognition on the same conditions as the unions.

Until 1900, for reasons into which we need here enter, the above mentioned law had scarcely any success except in rural centres; since then the number of recognised unions has continued to increase, as the following table shows:

Table I. — *Trade Unions legally recognised during the period* 1899-1913.

Years	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
Unions legally recognised	103	108	134	176	177	170	149	268	434	319	282	283	379	440	460

Among these unions seven principal classes are to be distinguished, viz, unions of employers, of workmen, mixed unions (employers and employed) unions of farmers, unions of employés, unions of persons practising liberal professions, unions of merchants and miscellaneous unions.

The greatest number of legally constituted unions is in Eastern Flanders (110 in 1913); next comes Brabant (101 in 1913); then Western Flanders (66). Of all the classes of unions, the farmers' unions are the most numerous: of these 235 were founded in 1911, 275 in 1912, and 264 in 1913.

There are seven kinds of agricultural unions—those of a general character, stockowners' unions, poultry-keeping unions, unions of arable farmers, horticultural unions, vine-growers' unions and dairy unions.

At the end of 1910, there were in all 3,457 unions, as compared with 112 in 1899, 354 in 1901, 853 in 1904, 1,627 in 1907 and 2,407 in 1910. The 3,457 unions existing at the end of 1913 may be divided thus:

Unions of agriculturists	2,357
" " workmen	734
" " employers	126
" " persons exercising a liberal profession	97
" " merchants	62
" " employés	42
Mixed unions	22
Miscellaneous unions	17
	3,457

Agricultural unions may be numbered in different provinces thus: Western Flanders 518, Brabant 498, Eastern Flanders 473, Luxembourg 332, Namur 210, Antwerp 96, Hainault 94, Liège 81, Limbourg 55.

After the agricultural unions, in order of importance, come the unions of workmen which, as we have seen, had reached the number of 734 at the close of 1913. They belong to extremely varied industries, such as building (114), mines and quarries (108), metal-working (105), wood (87), etc. The greatest numbers of these unions are in the provinces of Antwerp (171,, Eastern Flanders (150) and Brabant (116).

To give an exact idea of the importance of the unions we should consider the amount of their receipts and expenses, but there are no recent data on this subject. The latest were for 1910, when the total receipts of the working unions were 1,429,973 fr. (as compared with 231,089 fr. in 1900) and the expenses, 1,390,763 fr. (as compared with 165,706 fr. in 1900).

The receipts arise principally from the contributions of members; these in 1910 amounted to 515,922 fr. These contributions are very variable, rising from a minimum of 25 centimes per member to a maximum of 10 fr. and

sometimes even to 20 fr. or more. The average contribution varies for the unions of employers from 4 fr. to 6 fr ; for unions of workmen from 7 fr. to 13 fr. ; for unions of persons exercising a liberal profession from 4 fr. to 6 fr. ; for unions of agriculturists from 25 centimes to 1 fr.

In the workmen's unions there are two characteristic kinds of receipts ; the contributions towards aid in case of involuntary unemployment, and in case of strike or lock-out. In both there has been a considerable increase in recent years, the first having risen from 9,306 fr. in 1907 to 25,279 fr. in 1910, the second from 4,303 fr. in 1907 to 13,493 fr. in 1910.

The unions frequently contract loans to furnish themselves with the funds necessary for their working.

Another special source of income is public grants (from the State, provinces and communes) which are bestowed on the unions by way of encouragement. In 1910 the total of these grants was 12,752 fr., about a tenth of the total income of the unions.

The agricultural unions absorb the greater part of this money (81.66 % in 1910) under the form of grants for the purchase of machinery for the benefit of members, for the organisation of competitions, for experiment stations and for the purchase and maintenance of high-class sires.

As we have already noted, the unions may buy seeds, manure, livestock, machinery and all other requirements for re-sale to their members. The purchases thus made in 1910 by 434 unions amounted to the sum of 7,931,523 fr. The unions making such purchases were almost all agricultural.

The unions may also buy the products of their profession or trade from members to re-sell to third parties. The value of such produce amounted in 1910 to 374,045 fr. Transactions of this kind have only been carried out by the farmers' unions.

Unions are authorised by law to buy machinery and implements of which their members may avail themselves by means of a hiring contract or otherwise. In 1910 these purchases amounted to 111,812 fr. and of this sum 99,62 % represented the purchases of the agricultural unions.

The considerable development of trade unions, as we see from the data above given, is due in a great measure to the assistance and encouragement of the State. It is sufficient to recall that to every new union of workmen a grant of 125 fr. is made on its establishment and that a permanent annual grant is made to unions of which the accounts are found to be in order by the competent authorities. Those unions which furnish the Government with information concerning their members and organisation receive a bounty varying, according to the case, from 2 to 20 fr. Finally, the State also makes grants for the propaganda expenses of those institutions which, by lectures or other means, promote the establishment of trade unions among workmen or employés, in conformity with the Law of March 31st., 1898.

§ 2. Co-operative societies.

These are regulated by the codified text sanctioned by royal decree of July 22nd., 1913, which co-ordinates all previous laws — those of 1873, 1881, 1886, and 1901 — and, besides, contains new provisions for further facilitating the development of these societies.

According to these laws a co-operative society is a society " composed of members whose number and contributions are variable, and whose shares are not transferable." It must, however, contain at least seven members, who may bind themselves jointly, or individually, with unlimited liability or liability limited to a specified sum.

By Belgian law co-operative societies are exempted from certain dues and taxes, and have special privileges (a grant on establishment, bounties, etc.).

Agricultural co-operative societies in particular have thus been enabled to make rapid progress in Belgium. Of societies for the purchase of seed, manure, feeding-stuffs and agricultural machines there were 337 in 1895; the number increased to 1,237 in 1910, and to 1,304 in 1912; the number of members rose in the same years from 26,726 to 73,951 and to 80,443. The purchases made by these societies, which amounted to 5,124,747 fr. in 1895 rose to 18,271,693 fr. in 1910, and to 19,312,612 fr. in 1912.

Of co-operative dairies, which were especially numerous in Limbourg and Luxembourg, there were 69 in 1895, and 559 in 1911, comprising respectively in each of the two years 3,501 and 57,474 members (an average of 103 per society).

These 57,474 members possessed in all 196,338 cows, an average of 3.4 per member.

In 1911, the date to which the latest official statistics refer, the value of the produce sold by these societies amounted to 39,793,726 fr. (as compared with 3,236,942 fr. in 1895) an average of 71,625 fr. per society and 193 fr. per member.

The sum of 39,793,726 fr. is made up as follows; 39,213,801 fr. accruing from the sale of butter, 33,953 fr. from the sale of cheese, 280,996 fr. from the sale of milk, and the balance from the sale of other dairy produce, especially skimmed milk.

The dairies in Belgium are worked by hand if small, and by steam if large. Most of them are grouped in federation (*minques*) for mutual protection and improvement.

The National Union of Belgian Dairies was lately founded in Brussels. Its object was to guarantee the purity of the produce of the societies belonging to it, and to further the progress and perfecting of the dairy industry. For this purpose it established a Supervision and Technical Inspection Office, to inspect the federated dairies, and to check the purity of their produce. When verified, the purity is attested by a special trade-mark, stamped on or affixed to the produce. This trade-mark has been

duly registered in conformity with the laws, and can only be used by the Union.

Rural banks of the Raiffeisen type form, in Belgium, another important group of agricultural co-operative societies. Their working is facilitated by the General Savings and Pension Bank, which by the Law of June 21st., 1894, was authorised to open in their favour credits guaranteed by the Central Banks (societies with limited liability). Of these there are eight, the most important of which is that of the *Boerenbond* (Peasants' League). But the rural banks made little use of the funds placed at their disposal by the General Savings and Pensions Bank, working solely on their own resources and those of their respective federations (1).

The following table contains the statistics of 1897 and 1912 relating to the transactions of the Raiffeisen banks affiliated to the Central Bank of the Boerenbond (2).

TABLE II. — *Transactions of the Raiffeisen Banks from* 1897 *to* 1912.

Year	Number of Raiffeisen banks in Belgium	Number of banks affiliated to the Central Bank of the Boerenbond	Number of members of affiliated banks	Amount of deposits	Deposits in hand on December 31st.	Amount of loans	Loans oustanding on December 31st.
1897	159	95	4,301	1,543,348.74	1,116,724.24	711,728.89	489,070.06
1898	200	135	5,780	2,724,901.34	1,899,821.86	1,158,436.48	772,846.44
1899	230	158	7,188	4,471,684.85	2,900,272.70	2,168,705.60	1,328,462.01
1900	264	171	8,576	6,533,258.75	4,024,177.40	3,301,507.72	1,944,562.80
1901	284	183	9,522	9,372,037.53	5,457,569.44	4,894,915.27	2,570,249.02
1902	308	190	10,746	13,404,320.27	7,560,462.94	5,821,093.55	3,031,324.30
1903	361	195	11,523	18,210,145.73	9,243,665.16	7,608,275.56	3,776,658.58
1904	397	205	12,902	22,405,860.87	11,124,757.58	9,494,167.77	4,941,966.29
1905	431	215	13,085	26,075,609.60	11,988,544.03	11,108,064.69	5,210,922.01
1906	468	230	15,612	30,801,726.99	13,092,983.05	13,225,214.63	5,787,122.81
1907	540	265	17,372	37,055,442.48	14,649,201.52	16,019,687.50	7,332,294.67
1908	584	286	19,120	43,702,524.97	17,011,581.45	19,153,430.80	8,321,493.67
1909	618	297	21,495	51,958,242.09	19,081,468.17	22,600,168.66	9,373,632.47
1910	643	304	22,962	60,907,741.28	23,211,681.29	26,378,673.83	11.682,357.80
1911	697	333	25,233	72,261,274.42	27,072,258.38	30,939,035.97	13.236,248.26
1912	738	363	27,132	84,618,588.55	30,125,185.67	38,319,899.15	15.678,720.70

(1) On this subject see our article " The Work of the Boerenbond (Peasant's League) in 1913. " *Bulletin of Economic and Social Intelligence*, July 1915, pages 1 et sqq.

(2) See the report of the *Boerenbond* for 1913, drawn up by its secretary-general, Canon E. Luytgaerens, S. Th. B. and published at Louvain in 1914.

From this table it will be seen that the transactions of the rural banks affiliated to the Central Bank of the *Boerenbond* (1) that is, about half the banks in Belgium, show steady progress.

Lastly, in 1912 there were in Belgium 1,439 non-agricultural co-operative societies, as compared with 38 in 1875, 316 in 1895, and 1,132 in 1910.

At the close of 1908 there were 945 non-agricultural co-operative societies, of which 394 were distributive co-operative societies. For 782 non-agricultural co-operative societies the total business transacted amounted to 959,094,825 fr. in 1908.

§ 3. Mutual societies.

The mutual societies of which we are now to speak are those formed under the Law of June 23rd., 1894, which are intended to secure to members and their families temporary assistance in case of illness, accident, infirmity, to defray funeral expenses, to assist the families of deceased members, and to facilitate enrolment in savings, pension and insurance banks.

The law distinguishes between those societies which *have a right* to legal recognition and those which *may* obtain it should the government think fit, after consideration of the object they seek and the means at their disposal.

Societies which have their head-quarters in Belgium, and are constituted for the purposes above-mentioned have a right to legal recognition, and they alone receive grants and bounties from the public authorities (2).

The number of mutual societies recognised in 1890 was 373; in 1900 it had risen to 4,997 ; in 1905 to 7,079 ; in 1910 to 8,541, and in 1912 to 9,138.

The number of societies receiving bounties and grants from the State amounted in 1895 to 147 ; in 1900 to 3,327 ; in 1905 to 5,053 ; in 1910 to 5,676, and in 1912 to 5,850.

(1) The Central Credit Bank of the Boerenbond, a co-operative society with limited liability, is a federation of rural banks which has five different departments: (*a*) to receive on deposit from local banks, at 3 % interest, the funds which they cannot employ in loans to members; (*b*) to open credits or advance money to affiliated banks which have not sufficient funds ; (*c*) to inspect the management and accounts of federated banks: (*d*) since 1904 to carry on land credit transactions.

On the December 31st., 1913, of 762 banks in Belgium, 378 were affiliated to this central bank. At that date the Bank had a guaranteed capital of 7,671,000 fr. having received in deposit from local banks 15,517,251 fr. and from private individuals 593,119 fr. For the year 1913 the total business of the bank (in-comings and out-goings) amounted to 49,766,292 fr.; it granted to the affiliated banks 39 credits on current account for the sum of 746,000 fr. In that year it effected 111 land credit transactions to the amount of 676,250 fr.

(2) See on this subject our article, "The Rôle of Mutual Aid Societies in Old Age and Disablement Insurance." *Bulletin of Economic and Social Intelligence*, January 1913, pages 51 et seqq.

The number of members in 1900 was 644,716, and in 1912 it was 685,000. The amount of the premiums paid by them was 2,902,526 fr. in 1900; in 1910 it was 10,847,697 fr. and in 1912 it was 14,813,706 fr.

The number of persons (of less than 65 years of age) enrolled in banks of reinsurance and disablement was 183,023 in 1910. During that year the receipts amounted to 693,933 fr. and the expenses to 420,462 fr. of which 378,350 frs. were paid in compensation. The number of persons above 65 years of age so enrolled was 1,930, and the receipts and expenses respectively were 39,137 fr. and 32,853 fr. of which 31,521 were paid in compensations. The following table shows the number and the working of recognised mutual societies for insurance against sickness.

TABLE III. — *Number and Working of Recognised Mutual Societies.*

Year	Number of societies	Number of insured members	Number of days in respect of which compensation was paid	Receipts fr.	Expenses fr.	Owned capital of the societies
1891	412	54,870	335,304	933,851	803,133	2,127,771
1895	734	87,312	534,596	1,415,945	1,227,336	2,830,648
1900	1,790	196,487	1,108,007	3,084,032	2,708,457	5,707,411
1905	2,400	266,033	1,377,604	4,209,124	3,839,101	8,006,218
1910	3,259	414,170	2,065,101	6,600,720	6,129,006	10,879,020
1911	3,299	449,979	2,509,071	7,525,472	6,794,918	12,798,804

As Belgium was one of the first countries to institute school mutual societies which, as is well known, are societies formed among present and former pupils of primary schools to distribute aid in sickness, and to form a first fund for old age pensions, it seems desirable to point out that on December 31st., 1912 there were in this country 3,148 of these societies with 283,101 members. The total amount of the subscriptions paid into these societies by the enrolled members at the time indicated and for the purpose specified above amounted to 10,855,375 fr.

BRITISH INDIA.

THE WORKING OF CENTRAL AND PROVINCIAL BANKS ACCORDING TO THE REPORT OF THE COMMITTEE ON CO-OPERATION.

Introduction.

In the January number of this Review we published some information with regard to the Committee on Co-operation in India which was appointed in October, 1914, to enquire into the progress of the co-operative movement especially in its higher stages and in its financial aspect, and which reported about a year later; and at the same time we reprinted the "Abstract Report" which the Committee prepared by way of preface to their full report. In the pages which follow we propose to summarise that part of the full report which relates to the work of Central and Provincial Banks and in general the connection between the various parts of the co-operative credit organisation, — matters to which the Committee's enquiries were primarily directed. This part of the report is too long to permit of our doing more than make occasional extracts from it, and, without attempting to follow the report as it stands, we shall adopt the method of presenting all the facts relating to Central and Provincial Banks which are given anywhere throughout the report and then giving briefly the Committee's criticisms and recommendations. We shall thus make use of a considerable amount of material which forms an appendix to the Report under the, title of "Systems of Central and Provincial Banks obtaining in the various Provinces of India."

A word of explanation is needed as to the terms used. English nomenclature here as in so many fields is convenient rather than consistent, and is apt to present difficulties to non-English people with a fondness for rigid definition. The institutions which in India finance primary societies are designated by various names in the various provinces. They are sometimes "banks," sometimes "banking unions," sometimes "unions of co-operative credit societies;" while the "banks" themselves may be described as "town" or "urban banks," "district," "central" or "provincial" banks. In the Committee's Report the term "Central Bank" is applied to all local financing institutions (some 200 in number) "concerned solely in the direct financing of primary societies, within an area sufficiently limited to allow them to exercise also the duties of supervision and control over these societies." The term "Provincial Bank"

should properly be applied to the apex institution in each province which has been established to co-ordinate and control the finances of the Central Banks and deals only with such banks and not directly with local societies. There are two banks which are clearly of this class, — the Provincial Banks of Bihar and the Central Provinces, — and the Central Bank of Mandalay is entitled to rank as the apex bank for the province of Burma. The Central Bank of Madras and Bombay are in a somewhat anomalous position, for while the area over which they do business is too large to permit of their exercising the functions of supervision and control they have not yet been placed in a position to do the work of apex banks. The five banks just referred to, however, will all be examined under the head of " Provincial Banks. "

§ 1. Number and distribution, constitution and management of central banks.

The number of Central Banks (as defined above) in India is 189. They may be classified according to their constitution as (1) banks of which the membership is confined to individuals, (2) banks of which the membership is confined to societies, and (3) banks which include both individuals and societies among their members. The number of banks, of each class in the various provinces is as shown in the following table.

Table I. — *Central Banks : Number and Distribution.*

Province	Class 1	Class 2	Class 3
Madras	4	—	3
Bombay	—	1	2
Bengal	3	6	24
Bihar and Orissa	—	1	11
United Provinces	—	14	41
Punjab	12	20	6
Burma	—	—	2
Central Provinces	—	—	28
Assam	2	—	4
Ajmer	—	—	5
Total	21	42	126

The first class includes banks in which individuals only are shareholders and banks in which registered societies may become shareholders, but upon exactly the same terms as individuals and without any special provision being made for their representation. In the case of banks of the third class a certain proportion — generally a large proportion — of the shares is reserved for registered societies which are given special representation on the board of directors.

Banks of the second class are those which would ordinarily be described as most truly co-operative in character, since in them is eliminated all conflict of interest between the Central Bank as lender and the local societies as borrowers. Banks of this class too can be conducted at a very small cost for management as the amount of supervision necessary is reduced to a minimum ; yet as shown above the number of banks of this class is comparatively small.

It might seriously be disputed whether banks of the first class are really entitled to be considered co-operative. They are hardly to be distinguished from joint stock banks, and in some cases they do not even limit their activity to transactions with co-operative societies. Many of them began as Urban Banks and gradually developed into the central financing agencies of rural societies, without making any change in their original constitution, thus leaving room for a conflict of interest between shareholders and customers. Such banks, like successful co-operative banks under similar conditions in other countries, tend to drift out of the co-operative movement and take their place among capitalistic institutions; but it must be recognised that they serve the movement well at a certain stage of its progress and theirs.

Central Banks are usually assigned a definite area within which they may deal with societies, and the tendency is to make this area conterminous with a District, a Sub-division, or some other administrative area. The number of societies to which a bank makes loans varies very considerably, largely because in some cases the bank deals directly with each local society while in others it deals with unions of the societies. In the latter case, dealing with groups of societies, a Central Bank may be able to serve a very large area.

It will be advisable to examine briefly the system of Guaranteeing Unions.

(i) *Guaranteeing Unions.*

Societies are formed into Unions in order to provide the machinery for their supervision and audit and for the purpose of facilitating the granting of loans by the central bank to local societies.

The system is most highly developed in Burma where the Upper Burma Central Co-operative Bank at Mandalay, working through 90 guaranteeing Unions is able to finance societies throughout practically the whole of the

province and fulfil the functions of an apex bank. Some 900 local societies are affiliated to it.

The Unions assess the credit of the societies and provide a mutual guarantee for the repayment of loans. A Union consists of from 5 to 35 societies and is managed by (*i*) a small Committee, (*ii*) the General Meeting of the Union at which each society is represented by two delegates. The Union (*a*) employs a Union clerk who keeps the accounts and instructs the secretaries of local societies in their duties, (*b*) issues any general regulations which may seem desirable and arranges for the inspection of affiliated societies by members of the Committee, (*c*) contributes to the maintenance of an Inspector who serves from 5 to 10 Unions, inspecting societies, correcting faults and sending reports to the Committee for their information, (*d*) passes upon applications for loans from affiliated societies.

A Union handles no funds for providing loans, and pays the expenses of its small staff by a levy of a few annas per cent. per annum on the working capital of constituent societies. Applications for loans pass from the Union to the Registrar for his approval, and the latter, if satisfied, directs the Central Bank to make a remittance. Each constituent society is liable in the case of defaults in repayment of a loan recommended by the Union to the extent of the maximum amount of loans from non-members held by it during the preceding year.

There are 7 Unions in Bengal, 4 in Madras and 2 in Assam. In Madras the constitution of the Unions has been varied from time to time and their success has been indifferent. Those latterly established do not guarantee any part of the loans to their societies. In the other two provinces the Unions have been modelled upon those of Burma.

§ 2. Central Banks: composition of capital.

Central Banks rely for their working capital upon four main sources: (1) shares, (2) deposits, (3) loans and (4) reserve fund. On June 30th., 1914, the amount from each source was approximately as follows:

	Rs.
Shares	27,02,078
Deposits	1,38,95,367
Loans	35,92,891
Reserve Fund	4,44,800

It will be instructive to examine each of these sources separately.

(i) *Shares.*

The share capital of 27.02 lakhs is subscribed by individual shareholder and by affiliated societies. In banks of the "mixed" type the shares held by individuals are sometimes distinguished as preference shares and enjoy either a certain right to a cumulative dividend or a prior claim on the capital in case of liquidation, the object being to make investment in the shares attractive to the outside public. The nominal value of shares ranges from Rs. 10 to Rs. 500, the shares assigned to individuals being sometimes of higher value than those held in the same bank by affiliated societies. Under Section 5 of the *Co-operative Societies Act*, 1912, no individual may hold more than one-fifth of the total share capital of any society, or in any case more than Rs. 1,000, *except with the special sanction of the local Government.* Practice varies with regard to the distribution of voting power. In the Punjab and the United Provinces, for instance, each share entitles the holder to one vote; in Assam and the Central Provinces each shareholder has one vote only; in Bombay and Burma voting power is carefully graduated so as to give proportionately fewer votes to large holders than to small.

Liability with respect to shares is ordinarily limited to their face value, but in a few provinces the banks have adopted the practice of fixing liability at some multiple of the nominal value of the shares held. Thus in Bihar and Orissa the liability of preference shareholders is usually double, while that of ordinary shareholders varies from five to ten times the value of the shares held. It is not the rule that shares are fully paid up. In Assam, for instance, only 50 per cent. of each share has been called up; in Bihar and Orissa the practice is for one-fifth of the subscribed capital to be called up at the start and no bank has so far called up more than two-fifths. The Committee disapproves of the use of reserve liability, particularly in the case of individual shareholders, on the ground that after the lapse of a certain time, and especially in moments of financial stringency, banks would find it difficult to obtain payment of any part outstanding on shares.

The question of the relation which the share capital bears to the total liabilities is important. In order to gain public confidence and attract deposits it is desirable that the share capital should be as large as possible consistently with economy in working. Particulars as to the paid up share capital of Central Banks in the various provinces are shown in the table below.

TABLE II. — *Central Banks : Paid Up Share Capital.*

Province	Amount of paid up Share Capital	Average per Bank	Percentage of paid up Share Capital to total liabilities
	Rs.	Rs.	
Madras	1,97,000	8,000	8.3
Bombay	59,000	9,000	24.1
Bengal	3,84,000	11,000	11.5
Bihar and Orissa	1,15,000	9,000	13.9
United Provinces	6,31,000	11,000	10.4
Punjab	6,19,000	16,000	13.9
Burma	53,000	26,000	12.6
Central Provinces	4,97,000	17,000	18.9
Assam	25,000	4,000	14.4
Ajmer	1,22,000	24,000	16.0
Total	27,02,000	—	—

There is, lastly, the question of the dividend paid on shares. Most of the local Governments, availing themselves of the power conferred by the Act of 1912, have issued rules limiting the rate of dividend which may be paid, the maximum rate being fixed usually at 12 or 12 ½ per cent. In Bombay the maximum under certain conditions, has been fixed at 9 per cent. and in Burma it is as high as 30 per cent., but it must be noted that the maximum rates of 12 per cent. or over have seldom been reached in practice.

(ii) *Deposits.*

Deposits from members and non-members in Central Banks (including loans from joint stock banks which in the returns are not distinguished from deposits) amount to Rs. 1,38,95,000 of which Rs. 38,17,000 are from members. For the whole of India, deposits amount to 65.4 per cent. of the total liabilities. They are obtained chiefly from persons of the middle classes, — professional men, landowners of medium status, Government servants and Europeans. Only to a very limited extent, and that only in Bengal and parts of Northern India, do Central Banks compete with joint stock banks for deposits. The rate of interest paid on deposits is normally from 5 to 7 per cent. on deposits for one year, increasing by not more than one

per cent. for each additional year on deposits for longer terms. A certain small proportion of the deposits consists of deposits made by societies affiliated to the Banks. In Madras it is *compulsory* for societies to deposit their reserves with the Central Bank; in Burma one-quarter must be so deposited.

(iii) *Loans to Central Banks.*

Central Banks make use of loans from four sources: (1) outside banks, (2) other Central Banks, (3) Provincial Banks and (4) Government.

The outside banks are either Presidency Banks or ordinary joint stock banks. The Presidency Banks of Madras and Bengal accommodate banks with cash credit upon certain conditions, and on January 1, 1915, the total cash credits sanctioned amounted to Rs. 8,45,000 of which amount the banks had drawn Rs. 5,33,657. Presidency Banks are by their constitution forbidden to make any advance for longer than six months so that they can serve the co-operative movement to a limited extent only. Central Banks, however, can generally obtain either cash credits or loans from joint stock banks at reasonable rates. The sums actually so advanced were on January 1, 1915, as follows:

TABLE III. — *Advances from Joint Stock Bank to Central Banks, January* 1, 1915.

Province	Total cash credits sanctioned	Number of cash credits sanctioned	Amount actually drawn	Loans
	Rs.		Rs.	Rs.
Madras	60,000	2	44,000	36,000
Bengal	6,50,000	5	5,88,057	—
Bihar and Orissa	7,000	2	942	—
United Provinces	3,32,600	8	1,86,400	97,900
Punjab	1,00,000	1	66,650	—
Total	11,49,600	18	8,86,049	1,33,900

Where there is no bank in the position of a Provincial Bank (1) the only way in which Central Banks can use their surplus funds for the good of the co-operative movement is by lending to one another. The total so lent is considerable, amounting at the close of the financial year 1913-14, to Rs. 12,57,000, but if, as the Committee recommends, an apex bank be

(1) In the Committee's report five banks are considered to rank as Provincial Banks, one in each of the provinces of Bombay, Madras, Central Provinces, Burma, Bihar and Orissa.

established in every province, lending between the banks themselves will be discontinued. Provincial Banks are already the principal source from which the Central Banks obtain loans, providing a total of Rs. 17,40,000 at the close of 1913-14.

Government loans are insignificant in amount. At the close of 1913-14 they reached a total of only Rs. 94,000 and even this small amount tends to decrease as other sources of capital develop.

(iv) *Reserve Fund.*

Central Banks as a rule place only the legal minimum of one-fourth of their net profit to the reserve fund, distributing the remainder as dividend or allotting it to certain special funds — Building Funds, Dividend Equalisation Funds, etc. The actual amount of the reserve fund of all central banks is Rs. 4,44,000, equal to 2.1 per cent. of the total liabilities. There is no uniform rule with regard to the employment of the reserve fund and it is often employed in the bank's own business.

(v) *Reserve Fund together with Paid Up Share Capital.*

The capital *owned* by the Central Banks (as opposed to capital *held and used* by them) consists of the reserve fund and the paid up share capital and it is of considerable interest to depositors to know what relation this total bears to the total liabilities. The proportion for each province is shown below.

TABLE IV. — *Proportion of Capital Owned by Central Banks.*

Province	Percentage of paid up share capital and reserve fund on total liabilities
Madras	8.8
Bombay	25.1
Bengal	12.5
Bihar and Orissa	15.7
United Provinces	15.5
Punjab	14.6
Burma	12.9
Central Provinces	19.6
Assam	17.1
Ajmer	17.0
Total: British India	14.8

The proportion may be considered very satisfactory. The Committee express the opinion that in ordinary circumstances paid up share capital and reserve should be equal to not less than 12 ½ per cent. on the total liabilities and it will be seen that the actual percentage for all Central Banks is 14.8. For the 18 chief joint stock banks in India the corresponding figure is 13.9 per cent.

§ 3. Central banks: employment of capital.

The business of a Central Bank in India as in Europe is to finance local societies and balance their funds. There is, however, a difference of emphasis; for while in India by far the more important function of Central Banks is the provision of capital, the European banks are occupied chiefly with the work of balancing or equalising the funds in the possession of local societies. The difference is striking. In India co-operative institutions — Provincial and Central Banks together — furnish 53 per cent. of the capital borrowed by local societies, whereas in Germany, for instance, the proportion furnished by Central Banks is only 8 per cent. In the words of the Report, "the Central Bank fulfils a more important and a more difficult role in India than in most European countries."

In some cases Central Banks make loans to individual members as well as to affiliated societies but the practice is not approved, and where it exists will probably soon be discontinued. It is the custom for the bulk of the loans to societies to be passed upon once or twice a year. The societies estimate their needs beforehand and at the proper time present their applications for loans to the Central Bank. Ordinarily cash credits are not granted. They are, however, in use in Burma where they are granted to Unions, or to individual societies on the recommendation of a Union. There are occasional and apparently sporadic credits, in Madras, Bombay, the United Provinces and Bengal.

There were two questions to which the Committee devoted special attention, namely the period for which loans are granted and the need for keeping an adequate fluid reserve.

We shall deal with these points separately.

(i) *The Period for which Loans are granted.*

The Committee do not regard the determination of a precise date for the repayment of loans as a necessity, provided that within the societies to which a bank lends a precise date is fixed for the repayment of loans by individual members. If no precise date is fixed societies would hold their loans nominally at call and would practically be enjoying the advantages of a cash credit except in that a fresh application would have to be made for

each loan. Whether, however, the period of the loans be express or implied it should bear a very clear relation to the terms for which the Central Bank holds its deposits. The period for which deposits are held is largely within the control of the Bank which should arrange its loans to societies in such a way as to ensure that it will be able at all times to meet the demands of its depositors. What the Committee has to say in this connection is important and we shall give their own words. "We regret," they say, " to find that the practice of many Central Banks is not in accord with this sound principle. Their tendency is to grant loans to societies for long terms and to permit societies similarly to advance loans for long periods to their members to suit their convenience. At the same time they raise deposit capital as cheaply as possible on comparatively short terms, without sufficient regard to their ability to repay it on maturity, hoping, when the time comes, to secure either fresh deposits or renewals of existing deposits. The fact that they hold the pro-notes of societies payable at call does not justify this procedure, as it is clear that such debts cannot be called in without placing the members of their affiliated societies in an impossible position. In correlating loans and deposits it is not in our opinion correct to count on the renewal of deposits."

In deciding what loans it can make and for what length of time it can make them, a Central Bank requires to know what repayments may be reasonably expected by affiliated societies from their members, and must have an understanding with the societies that the bulk of the repayments are to be passed on by them to the Bank in reduction of their loan accounts. The Committee says : " The data might at first be uncertain and unreliable but a few year's experience should put the Bank in a satisfactory position for estimating repaying capacity." The Committee prepared a return showing for the four years 1910-11 to 1913-14 the percentage of repayments in each province annually on the total amount of loans outstanding at the end of the previous year *plus* the amount advanced on loan in the course of the year. The figures are shown in the following table.

TABLE V. — *Percentages Repaid Annually on Loans Outstanding and Advanced.*

Province	1910–11	1911–12	1912–13	1913-14	Four years' average
Madras	18.7	16.4	20.1	15.7	17.6
Bombay	35.2	31.0	19.3	38.8	30.6
Bengal	10.2	10.0	18.4	14.9	15.1
Bihar and Orissa	—	43.0	22.3	28.4	27.6
United Provinces	47.4	55.5	55.9	41.0	48.4
Punjab	17.0	20.1	18.5	17.1	18.1
Burma	5.0	19.8	29.8	26.5	24.5
Central Provinces	18.8	14.9	35.2	32.4	31.8
Assam	20.6	9.1	31.4	18.7	19.5
Ajmer	30.5	38.5	49.5	29.3	38.7
Total	22.4	27.2	32.4	27.6	28.6

Figures are not available for Coorg where, however, the transactions of societies are on a very small scale.

The Committee point out that it is essential that Central Banks supervise closely the repayments made by borrowing members to affiliated societies, because such repayments are the true measure of a society's power to make repayments on its loan account with the Central Bank. It is not sufficient that a society should be punctual in the repayment of its debts to the Central Bank; it is essential to know from what source it is obtaining the necessary funds as it would be quite possible to make repayments out of fresh deposits and at the same time show dangerous laxity in the recovery of debts due by members.

No rule can be laid down as to the length of the periods for which Central Banks should make loans to affiliated societies. The societies when making application should state the chief purposes for which the loans are required, and repayment, either in instalments or in a single sum, should be arranged on the basis of the repayments which individual borrowers may be expected to make to their societies.

(ii) *The Maintenance of an Adequate Fluid Capital.*

The Committee finds that the needs for maintaining an adequate part of their capital in the form of a fluid resource has not been clearly realised by Central Banks. A certain fluid resource is necessary to enable the banks

to meet periods of contraction of credit during which there will be a drain upon their deposits while new deposits will probably not be forthcoming. In India such a contraction of credit will often be due to some calamity affecting agriculture, so that Central Banks at such a time must be prepared not only to face a reduction in the repayments made by societies to which they lend, but in addition to advance money freely to their affiliated societies to enable them to tide over the crisis. To meet these contingencies a bank must hold fluid resources in the form of cash, or of investments which are at all times readily saleable or pledgeable, or of the undrawn portion of a cash credit with some other bank — provided it be certain that the other bank will not withdraw the accommodation precisely when it is most needed. It must be clearly laid down that the fluid resources are not to be used in the bank's own business except in a time of financial difficulty.

The Committee point out of the difficulty of fixing any figure for the fluid resources of a co-operative Central Bank. Joint stock banks generally fix the amount of fluid capital held at some percentage of the total deposits, but joint stock banks have a long record of experience to assist them in deciding the question, and their directors have a familiarity with finance which the directors of co-operative banks seldom possess. Moreover, joint stock banks can always count on rediscounting a substantial part of the "paper" which they hold, while co-operative banks in the present stage of the movement, having no facilities for rediscounting, must regard the paper which they hold as security for loans advanced to societies as so much capital locked up. They are forced, therefore, to hold what is from the ordinary banker's point of view an uneconomically large sum in cash and readily realisable securities.

After careful consideration of a number of suggested standards for the determination of the proper ratio between deposits and fluid resource, the Committee arrive at the conclusion that the banks should, apart from the needs of current and savings accounts, maintain as fluid resources a sum sufficient to meet half the fixed deposits falling due in the course of the ensuing year, even if no fresh deposits were received and no repayments were made by societies. The Committee were of opinion that an average period of crisis would last six months but that it is advisable that the banks should make provision at any time, not for the deposits falling due in the ensuing half year, but for half the deposits falling due in the ensuing year, since in many cases, either by chance or by arrangement, the bulk of the deposits fall due at one time of the year.

The Committee called for special returns from which they prepared the table reproduced below. It shows for Central and Provincial Banks together in each province: (i) the total of all deposits from members and non-members on 1st. January, 1915; (ii) the amount of such deposits due for repayment in the half year 1st. January to 1st. July, 1915; (iii) one-half of the fixed deposits due in 1915, and the whole of current deposits; (iv) one-third of the total deposits; (v) liquid resources actually available on 1st. January, 1915; (vi) working capital on the same date. The figures are in lakhs of rupees.

The standard for determining liquid resources approved by the Committee is item (iii) — one half of the fixed deposits due in 1915, and the whole of current deposits. The standard usually adopted in joint stock banks is item (iv) — one-third of the total deposits. It will be seen that for the whole of India the amounts, under these two standards are approximately equal, and that under either standard the amount which would be held as fluid resources is some 50 per cent. greater than the amount actually held.

TABLE VI. — *Deposits and Liquid Resources of Provincial and Central Banks combined.*

Province	Total of all deposits from non-members and members	Deposits falling due 1st. Jan. to 1st. July 1915 including current accounts	One-half of deposits due in 1915 *plus* all current deposits	One-third of all deposits	Cash in hand and liquid resources on 1st. January 1915		Working capital 1st. January 1915
					Including undrawn cash credits	Excluding undrawn cash credits	
Madras	37.35	14.49	14.20	12.45	6.25	3.05	52.19
Bombay	6.98	4.97	3.60	2.32	.18	.18	18.14
Bengal	23.62	5.41	6.04	7.87	2.98	2.14	32.64
Bihar and Orissa . .	10.45	7.85	4.13	3.88	3.22	.29	8.05
United Provinces . .	40.63	11.21	11.85	13.54	8.55	7.09	59.10
Punjab	23.38	9.83	9.67	7.79	3.87	1.37	41.55
Burma	23.82	4.80	4.66	7.94	5.71	2.88	26.57
Central Provinces . .	15.92	4.57	4.98	5.31	10.29	1.78	38.17
Assam	1.50	.24	.56	.50	.17	.17	1.70
Ajmer	5.78	2.45	2.50	1.93	2.16	2.16	7.50
Total . . .	189.43	65.82	62.19	63.53	41.38	21.11	285.61

§ 4. PROVINCIAL BANKS.

There are only two banks in the Indian co-operative movement which are described as Provincial Banks. These are in Bihar and the Central Provinces, but in neither province is the bank as yet of any great importance. There are three other banks which are in some respects at least in the position of provincial banks, namely, the Madras Central Urban Bank, the Bombay Central Bank, and the Mandalay Central Bank. In Madras the Central Urban Bank, though the great bulk of its loans are made direct to primary societies, has begun to act as a clearing-house for the funds

of Central Banks, but is not in a position to exercise control over these banks. The Bombay Central Bank, in view of the fact that eight-ninths of the loans to societies in the Province have been made by it, occupies a predominant position in the movement, but it does not control the three Central Banks in the province. In Burma the Mandalay Central Bank has made four-fifths of the loans to societies and also finances the two Central Banks which have been established.

The fact that these three banks are so diverse in character prevents any useful conclusions being drawn from their working, and, as has already been mentioned, the Provincial Banks in Bihar and the Central Provinces are as yet on a comparatively small scale. The Committee make important recommendations, which we shall presently be examining, with regard to the establishment of a strong apex bank in each province. Meanwhile we shall give particulars of the composition of the working capital of the five banks mentioned above.

(i) *Working Capital.*

The table below shows the amount of the working capital and the sources from which it is drawn. The figures are given in lakhs of rupees.

TABLE VII. — *Working Capital of Banks acting as Provincial Banks.*

	Bombay	Madras	Central Provinces	Burma	Bihar and Orissa	Total
Shares	3.84	2.00	2.93	1.92	.52	11.21
Deposits	12.51	23.34	7.30	21.50	1.97	66.62
Loans	—	2.68	1.48	.16	1.14	5.46
Reserve Fund . . .	.18	.76	.20	.47	—	.61
Total . . .	16.53	28.78	11.91	24.05	3.63	84.90

As regards share capital it is only in Burma and in Bihar that the number of individual shareholders is limited and societies are given a preponderating voting power upon the Directorates of the banks. In Madras all the shareholders are individuals ; in the Central Provinces the directors of Central Banks happen, in some cases, to be shareholders in the Provincial Bank, but they possess voting power in the latter as individual shareholders and not as representatives of the Central Banks and their affiliated societies ; in Bombay only six societies have becomes shareholders though the opportunity to subscribe for shares was given to all societies in the province.

The deposits shown above consist of sums received from individual members or the public and funds passed on to the Provincial Banks by Central Banks and societies — the latter being comparatively unimportant in amount. On January 1st, 1915, out of deposits amounting to 66.62 lakhs of rupees, 61.60 lakhs were from individuals and only 5.02 lakhs from Central Banks and local societies.

The loans (amounting to 5.6 lakhs of rupees) have been obtained from Presidency and joint stock banks and represent that portion of certain cash credits granted by these banks which the Provincial Banks have drawn upon. The Banks of Madras and Mandalay and the Provincial Bank of Bihar have been granted cash credits of 5, 1 and 4 lakhs respectively by Presidency Banks. The Provincial Bank of the Central Provinces has been granted a cash credit of ten lakhs and the Bank of Mandalay one of thirty thousand rupees by joint stock banks.

(ii) *The Recommendations of the Committee.*

The Committee recommend that in each of the major provinces a strong apex bank should be established or the leading existing intitution in the province should be raised to the status of an apex bank. They consider that the co-operative movement in Burma is adequately served by existing arrangements, and also that if a Union system on the lines of the Burma system could be introduced into Bombay the Central Bank there could be adapted to serve adequately the co-operative interests of the province.

They make some further recommendations concerning the constitution and working of a Provincial or apex bank. Co-operative institutions should be represented in such a bank, but it is not necessary that they should preponderate both in the General Meeting and on the Directorate. The management of a Provincial Bank requires business ability and a knowledge of finance which are not ordinarily possessed by the representatives of co-operative institutions, and the actual management would probably with advantage be left largely in the hands of individual men of business who held shares. But the bye-laws should be so framed that by controlling the General Meeting of shareholders the representatives of co-operative institutions can always prevent the Directorate from exploiting co-operation for the benefit of individual shareholders.

Where possible only one class of shares should be issued, but if ordinary shares are not sufficiently attractive there is no objection to treating the shares held by the public as preference shares. The latter shares should be fully paid up, but in the case of shares held by co-operative institutions it is legitimate to require only a quarter or a half of their face value to be paid up. The number of shares available for co-operative institutions should in any case be unlimited and the Provincial Bank should require Central Banks to hold shares in proportion to their borrowings.

The Committee admit that Provincial Banks will probably have need

more frequently than Central Banks to raise short-term deposits, but they insist that every effort should be made to secure deposits for as long terms as possible. Cash credits from Presidency and joint stock banks are, in the opinion of the Committee, a rather uncertain resource and banks are warned against placing " excessive reliance " on this source of supply.

With regard to fluid resources the Committee consider that it will suffice if Provincial Banks maintain at all times sufficient to cover one-third only of the liabilities falling due in the course of the ensuing year. This standard is lower than that recommended for Central Banks since the liabilities are spread over a much wider area and a larger number of institutions, thus lessening the risk of a sudden concentration of demand.

The question of permitting Provincial Banks to engage in business outside the co-operative movement was taken into consideration by the Committee who were of opinion that, for the present at least and for some time to come, it would be inadvisable to permit such business except in so far as it may be found necessary to lend or deposit spare funds for short periods in outside institutions. In this connection the Committee in their report say: " The disposal of spare funds to outside institutions, though at present of little account, is a matter of great potential importance. Good interest can be obtained for money in Upper India, Bombay, Madras and (though for a shorter term) in Burma between the months of October and April or May, when there is in normal years a steady demand for money for the movement of crops and for the import trade. The sums repaid by agricultural co-operative societies are often not required again for loans for 2 or 3 months and the ability to obtain remunerative rates on such sums for this period is an important factor in co-operative banking. "

UNITED STATES.

CO-OPERATION IN MINNESOTA (*Continued*).

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§ 4. Live-stock shipping associations.

The total number of live-stock shipping associations in Minnesota as shown in the summary table (1) was 115 on January 1, 1914, but the number has been increasing rapidly since that time, and on January 1, 1915, there were about 150 of these associations. The movement is a recent one; it began in 1908, but the most pronounced development has occurred since 1911. Here again Minnesota is by far the leading state of the United States with respect to number of associations, although the movement has begun to spread to other states.

The total value of live-stock marketed in 1913 through these associations was about $6,000,000; the average per association operating throughout the year was in the neighbourhood of $60,000. About 12 per cent. of all live-stock marketed by Minnesota farmers is marketed through the associations, and this proportion is increasing. Estimated summary figures dealing with the operations of the 115 associations in 1913 are as follows:

	Total	Average per Association
Car-loads of stock marketed	4,500	44.7
Cattle marketed	3,300	329
Hogs marketed	250,000	2,372
Calves marketed	30,000	465
Sheep marketed	15,000	192
Average expenses per association		$2,760
Average expenses per 100 pounds		$0,33

Total weight of all stock marketed 86,000,000 pounds.

(1) See the *Review*, February, 1916, p. 12.

To understand the reasons for the existence of and the economic functions performed by shipping associations it is necessary to know something of the methods of marketing live-stock in Minnesota and other states of the United States. In general, there are two principal methods by which a farmer disposes of this stock : first, if he has enough stock to market at one time he is likely to ship direct to a commission dealer in a primary market ; or second, he may sell to a local buyer who collects the small consignments of individual farmers and ships in car-load lots to primary markets. Direct shipment by individual farmers is practicable only when they can ship in car-load lots ; the freight rate on less-than-car-load shipments is so high as to be prohibitive. It follows that co-operative shipping associations are of special value to communities where farmers raise stock for market in comparatively small quantities. In fact, shipping associations have developed in Minnesota, not in those sections of the state where live-stock raising has become most important, because the individual farmers of those sections ship their large consignments direct in car-load lots, but rather in the newer sections where stock-raising is more of a side line to grain growing and dairying, and where individual farmers have only a few head of beef cattle or hogs to market at one time. It is also noticeable that co-operative shipping has not developed, and has not been especially necessary, in other states like Iowa where live-stock is raised on a larger scale than in Minnesota.

When individual farmers have small quantities of live-stock to market, it is necessary that there should be some agency at the local shipping point to collect the consignments of individual farmers for shipment in car-load lots. Local cattle buyers largely perform this function. These buyers drive about from farm to farm, making offers for such stock as farmers are willing to sell. They often make an offer of a certain round sum for a number of cattle together, and stand ready to pay cash if the farmer is willing to sell. Since the buyers are more expert judges of the quality of stock than are the farmers themselves and since they are more familiar with market conditions and prices, they are often able to induce farmers to part with their stock at unfairly low prices. Furthermore, the local stock buyer must take out a large enough margin to pay him for his time, his expenses in driving around the country, and to protect him for his risk of price fluctuation between the time that he purchases in the country and the time that the stock reaches the primary market. Oftentimes there are four or five stock buyers of this sort at a single country shipping point, resulting in a considerable duplication of effort and expense.

Although local cattle buyers perform useful functions in furnishing a market for live-stock, it has been found that these same functions can be performed more efficiently and economically through a co-operative shipping association, which takes the place of the local buyers. The principal market for Minnesota live-stock is at South St. Paul, where there is a large slaughtering and meat-packing plant, and farm live-stock values in Minnesota are based mainly on South St. Paul values, the differences being represented by freight rates, commission charges, cost of handling at local points, and other incidental expenses. It has been found that local cattle

buyers pay farmers from 50 cents to one dollar a hundred pounds less than South St. Paul values, whereas through co-operative shipping associations, the farmers receive on the average about 33 cents less than South St. Paul prices. This saving is considerable.

Live-stock shipping associations are perhaps the easiest form of co-operation for farmers to organize and operate, and failures are very rare. No investment of capital is necessary, because the only equipment that is needed is a stock-pen at the railroad station, and this is furnished by the railroad company. Consequently there is no risk involved, and the saving is so apparent that farmers are easily convinced that it is to their advantage to ship through the association. The associations are merely voluntary associations, and are not incorporated. Each association hires a manager, who comunicates with the farmers by telephone, finding out how many head of stock they wish to sell, and informing them when they should be brought to shipping point. This eliminates the expense of driving about from farm to farm. The manager is usually paid a certain amount depending on the quantity of stock shipped through the association, — commonly six cents per hundred pounds in Minnesota. The manager is usually some man living at or near the shipping point who is engaged in some other business. No unusual degree of ability is necessary on his part.

When shipping through a co-operative association, the farmers do not receive cash for their stock when they bring it to market, but await returns after their shipments have been sold in the primary market. The cattle are branded in such a way as to identify the animals belonging to individual farmers, and returns are made accordingly. The returns from hog shipments are distributed on the basis of weight. After returns are received by the manager, he takes out enough to cover his own fees, and also a small amount for a sinking fund to cover losses in transit, etc., and the remainder is divided among the shippers at once. No profits are accumulated, and no patronage dividend is necessary.

§ 5. Co-operative stores.

As is well known, co-operative stores have not made much headway in the United States. Innumerable attempts have been made, but few have succeeded. As long ago as during the " Granger " movement of the decade 1870-80, there were hundreds of stores started, but the movement collapsed as suddenly as it began. The unfortunate experiences of thousands of farmers at that time undoubtedly served as a powerful check to the development of the whole co-operative movement.

Although many people cannot understand why co-operative stores have not succeeded in the United States, there seem to be fairly definite reasons. In the first place, the population is very heterogeneous, made up of many nationalities, and even those of the same nationality who live in close proximity to each other have usually been neighbours for much less

than a generation, and do not know each other as do families in old countries who have lived together and known each other for generations. The population of the United States, both urban and rural, is also very shifting. Many families live in one community or one neighbourhood for a relatively short time. People are continually moving from one part of the city to another, from one farm to another. Compare these conditions with those in the old settled countries of Europe, and it does not seem surprising that people should not hold together so well in co-operative enterprises.

But there are even more fundamental reasons than these. Both city dwellers and farmers have relatively much larger incomes in the United States than in European countries, and they are not forced by necessity to count the pennies so carefully. Retail stores are run on extremely small margins of profit; a co-operative store cannot be operated any more cheaply than a privately-owned store *if it gives the same quality of service*, including frequent deliveries, the granting of credit, large and varied stocks of goods, and a large number of shop assistants; and people in the United States are demanding these services more and more, and prefer to pay for them rather than go without them.

The only thing that the co-operative store can save to its members is the *net profit*, and this is so small as to be an insufficient inducement for people to undertake the responsibility and go to the trouble of running their own stores. Not even the net profit can be saved unless the co-operative store is managed as efficiently as the privately-owned store, and unfortunately, co-operative organizations too frequently employ inefficient managers. This has been one of the greatest weaknesses of the co-operative store movement in the United States.

One other feature of the co-operative store movement in the United States deserves mention. In the larger cities, when a co-operative store starts in business, the other stores often compete in a destructive fashion. They advertise certain " leaders " at greatly reduced prices, so as to draw people away from the co-operative store, and they generally succeed in drawing the patrons away from their own store.

In view of all these circumstances, it is not surprising that co-operative stores have made so little headway in the United States.

Such development as has occurred in the successful establishment of co-operative stores in the United States has been among farmers rather than among city inhabitants. In Minnesota, for example, there are about 120 cooperative stores, practically all of which are owned and operated by farmers in small villages and at country cross-roads. The total volume of business of these stores is problematical, but has been estimated at about $4,250,000. The aggregate sales of 61 stores in 1913, from which actual reports were received, were $2,593,633, or an average of $42,518 per store. Some of the stores are large, others are very small. The largest business reported by a single store was $161,850, and the smallest $5,312.

There are indications that within the last few years the co-operative store movement has been proceeding on a more substantial and business-like basis than formerly. There are many stores that are in a very prosper-

ous condition, and there are many that have been in business for a long time, although the following figures show that the majority of those now in business have been organized within the last six or seven years.

Date of Organization of 62 Co-operative Stores.

Year	Number of stores organised
1893	1
1894	1
1899	1
1900	1
1903	1
1904	1
1905	2
1906	3
1907	2
1908	6
1909	5
1910	8
1911	14
1912	9
1913	7

Fifty-nine stores reported a total of 6,160 stockholders, an average of 104 per company. Taking this as an average for the 120 stores, there are in the neighbourhood of 12,000 people who are members of co-operative store companies in Minnesota. Farmers own 86 per cent. of the stock and this is one of the significant features of the co-operative stores of the State: they are not found in the large cities, but are located in the villages and at country cross-roads, and are owned and operated by farmers. All have the one-man-one-vote principle, and out of 53 stores, all but 7 limit the number of shares that one person may own. Nearly half of these limit to 10 shares apiece, while some limit to 5 apiece.

Although the co-operative stores uniformly provide for patronage or trade dividends, there are many which have not had sufficient profits to pay any. In fact, out of 57 stores reporting, there were 18 that paid no dividend, even on stock. The average rate of stock dividend paid by the other 39 was 6.19 per cent. Twenty-eight paid trade dividends, an average rate of 5.6 per cent. to members and of 3.5 per cent. to non-members. The practice as to the payment of trade dividends to non-members varies. Out of 23 stores which reported on this point, there were 6 that paid the same rate to both members and non-members; 10 that paid members at twice

as high a rate as non-members; and 7 that paid trade dividends to members only.

Other figures are as follows:

	Number of stores reporting	Average per store
Gross sales	61	$52,518
Paid for merchandise	61	$35,178
Gross profit	61	$7,340
Total expenses	61	$4,620
Proportion of expenses to sales	61	10.9%
Net profit	61	$2,720
Salary of manager	54	$908
Value of goods on hand, January 1, 1914	57	$13,226
Paid-up capital	64	$9,880
Proportion of credit sales to total sales	50	31%
Proportion of total sales to members	50	59%

§ 6. Co-operative telephone companies.

A powerful influence for the improvement of social and economic conditions among farmers in the United States has been the development of rural telephone lines. In all the larger cities there are found ordinary stock corporations which operate telephone lines many of which extend into the surrounding farming communities. In those districts at a distance from the larger cities, however, the farmers have to rely largely on telephone lines which are built and operated co-operatively. An indication of the rapid development of the telephone in Minnesota is found in the fact that the total number of telephone companies (including both private stock and co-operative) increased from 148 in 1905 to 873 in 1913. Out of this 873 approximately 600 were owned and operated by the farmers co-operatively.

Detailed information was obtained from about 200 farmers' telephone companies. It appears that about 43 per cent. of these are not incorporated, and thus exist merely as voluntary associations. Out of 167 companies, 135, or 81 per cent., reported that a member might have but one vote irrespective of the number of shares held in the company. Out of 160 companies, 124, or 77.5 per cent. limit the number of shares that one person may own; about two-thirds of these set the limit at one.

One hundred and sixty-two companies have an average of 72 stockholders, 76 subscribers, and 72 miles of line, per company. In other words, there is approximately one subscriber for each mile of line. The average gross receipts of 146 companies were $1,500, and the average expenses, $970. Out of 133 companies reporting, 113, or 85 per cent., paid no dividends at all; the rest paid dividends ranging from 2.5 to 20 per cent. On

the whole, these companies are not run for profit. The cost of telephone service per year averages only $5.94, and in some of the smaller companies the rate is less than this. The subscriber usually has to buy his own instrument (costing about $12 or $13), and has to make, or have made at his expense, his connection with the main line. Furthermore there is likely to be an almost inconceivable number of subscribers on one line. When rural lines enter villages, a higher charge is sometimes made to business men than to householders.

§ 7. Insurance companies.

In two respects the "township mutual" insurance companies are unique: They were the first permanently successful form of co-operation developed in Minnesota; and not one has ever failed. It is claimed that the first two companies were started as early as 1867. The total business transacted by these companies is given in the summary table as $696,732, and this represents the receipts from premiums. The total amount of insurance in force on January 1, 1914, was $342,223,319. The growth of these farmers' fire insurance companies is shown in the following table:

	Insurance in force	Losses Incurred	Cost per $100 Insurance in force
1878	$923,678	$425	$0.14
1880	1,704,210	568	.08
1885	8,034,124	6,310	.14
1890	24,931,347	27,677	.15
1895	60,268,706	79,566	.17
1900	121,999,087	150,201	.19
1905	190,911,471	227,844	.17
1910	274,003,046	363,833	.18
1913	342,223,319	513,973	.18

The cost of insurance in these companies has been very low; in 1913 it was 18 cents per $100. The rate of the stock companies which still solicit this business is 46 cents per hundred dollars per year on three-year contracts. On the $342,000,000 of insurance carried by the township mutuals, these companies directly saved the farmers of the State $957,600 in the year 1913. The actual saving is much greater than this because the rates charged by the old line companies have been forced down by the competition of the farmers' companies. It has been estimated that the total saving for 35 years up to 1910, allowing for the effect of competition in reducing the rates of old line companies and for compound interest on the premium charges saved from year to year, would probably be about $20,000,000.

The number of policies in force on January 1, 1914 was 158,283, or about 2,000 more than the number of farms in the State. This is accounted

for by the fact that personal property and buildings are commonly insured on separate policies. It is a conservative estimate, however, that 75 or 80 per cent. of all farmers in Minnesota are insured in these co-operative companies.

There are also 7 " mutual " hail and cyclone insurance companies in Minnesota, but there are only 3 that are actually owned and managed by farmers. The latter write only cyclone insurance, and had $7,957,630 of insurance in force on January 1, 1914.

Other figures bearing on the co-operative fire insurance companies of Minnesota in 1913 are as follows:

	Total	Average per Company
Assets at beginning of year	$399,500.16	$2,594.09
Receipts during year	696,731.65	4,524.23
Losses paid	501,418.64	3,255.97
Expenses paid	195,133.18	1,267.10
Assets at end of year	399,679.99	2,595.32
Number of policies in force at end of year	158,283	1,028
Amount of insurance in force at end of year	$342,223,318.83	$2,222,230.64

MISCELLANEOUS INFORMATION RELATING TO CO-OPERATION AND ASSOCIATION IN VARIOUS COUNTRIES.

GERMANY.

THE WORK OF THE CO-OPERATIVE DAIRIES OF THE PROVINCIAL FEDERATION OF SILESIA IN 1913. — *Molkerei Zeitung*, Berlin, July 3rd., 1915.

Of the 36 co-operative societies belonging to the Federation, 13 have adopted unlimited liability, 21 limited liability and one only unlimited liability to make supplementary payments. It is for the most part, the older dairies which have adopted unlimited liability. The number of members is 2,811, an average of 78 per association, but in reality the number of members in the societies varies very much ; the smallest has only 10 members and the largest has 402. The oldest society dates from 1879; in 1908 a a certain diminution in the number of societies founded was apparent, and from that time but few have been formed.

The reason of the establishment of these few was the fall in the prices of dairy produce, proving once more that distress is the most powerful motive that urges people to combined action. As compared with other provinces, Silesia has few co-operative dairies, a proof, according to what has just been said, that as yet there is no really pressing need.

The total assets of the 36 co-operative societies was 3,541,649 marks, thus divided :

Cash	163,493	marks	including	163,593	marks	in	cash	or in kind
Dairy produce	82,641	»	»	82,641	»	»	»	»
Accessory articles and fodder	57,560	»	»					
Credit with members . . .	625,648	»	»	625,648	»	»	»	»
Pigs	77,534	»	»	77,534	»	»	»	»
Land and buildings	1,332,633	»						
Machines	403,055	»						
Implements and tools . . .	30,291	»						
Horses and vehicles . . .	22,758	»						
Credits with banks and others	618,221	»	»	618,221	»	»	»	»
Share in other enterprises (generally in the Central Bank)	127,815	»						
Total . . .	3,541,649	marks	including	1,567,537	marks	in	cash	or in kind

The balance in hand varies from 163 to 14,799 marks. In many cases the sums in hand must be considered as excessive, for, besides the risk of loss or theft, they bear no interest.

The variations of the assets in kind are shown below :

Stocks of dairy produce	44	to	27,178	marks
Accessory articles and fodder . . .	150	»	20,766	»
Credit with members	393	»	184,522	»

These figures do not always give an exact idea because in some cases all the arrears and more especially the Bank credits are placed under the head of " Current account. "

Pigs are kept only in five of the establishments. The danger of epidemics often involved in keeping large numbers of pigs, and the losses that might result, are almost insurmountable objections to fattening them on a large scale.

The following figures show the fluctuations in the value of :

Lands and buildings	from 10,302	marks	to 279,166	marks
Machines	» 1	mark	» 86,148	»
Implements	» 2	marks	» 6,888	»
Horses and vehicles	» 1	mark	» 15,991	»

The values of one mark or two marks are values " pour mémoire, " much exceeded by the real value. What has been already said shows the necessity in general of proceeding with caution in the estimation of assets, so as to avoid any unexpected pitfalls. But unfortunately from this point of view there are some exceptions.

The liabilities, including the owned capital, amount to 2,773,758 marks thus divided :

Loans and bank debts (1)	812,679	marks
Dairy produce debts at short date	535,035	"
Current debts (at short date)	215,158	"
Total amount of liabilities exclusive of the owned capital . . .	1,562,872	marks

The owned capital comprises :

Credits with third parties (2)	258,385	marks
Reserve fund	436,838	"
Working reserve and other reserves	515,663	"
Total owned capital	1,210,886	marks
Total liabilities	2,773,758	marks

(1) The bank debts are chiefly in the form of loans at long date.

(2) About 92 marks per member.

In many places the formation of reserves meets with opposition; this is more frequently the case when the number of members is liable to considerable variation.

As may be seen from an examination of the balance sheets, in comparison with liquid assets to the amount of 1,567,537 marks, we find 750,193 marks in debts at short date. Even when to this the bank debts are added the proportion remains normal.

The total cost of working amounts to 800,392 marks, divided as follows:

Salaries, wages, and insurance	203,808	marks
Cost of removals	3,225	"
Heating	62,620	"
Lighting	4,330	"
Packing cases, etc.	22,354	"
Cost of transport, carriage and forwarding	32,334	"
Commercial reports, newspapers and advertising	5,666	"
Cost of carting	100,544	"
Articles necessary for working	19,685	"
Articles necessary in manufacture	18,512	"
Researches and expert advice	3,526	"
Repairs, taxes, and other expenses	34,969	"
Sundry items	288,819	"
Total cost of working	800,392	marks

The heading " sundry items " amounts to a high figure chiefly because many societies have not divided the cost of working. For this reason also the preceding statement does not give an exact idea of the distribution of expenses. In spite of every effort, it has not been possible to obtain greater precision from the associations in this matter.

The interest amounted to 51,808 marks. This it may be seen is a sum which ought to act as a stimulus to the paying off of debts.

Such payments are thus divided amongst the chief items of the balance sheet:

Land and buildings	36,692	marks
Machines	44,292	"
Implements, tools, vehicles, and horses	32,333	"
Total	113,317	marks

In Table III of the statistical report there are unfortunately so many blanks that we must confine ourselves to saying that the total amount of milk delivered was 71,533,407 kg., an average of 1,987,039 kg. per society. The amount delivered varied from 397,248 to 11,602,274 kg.

BRAZIL.

AGRICULTURAL CO-OPERATIVE SOCIETIES OF THE STATE OF MINAS GERAES. — *Bulletin Officiel du Bureau de Renseignements du Brésil à Paris*, September 15th., 1915.

Three new agricultural co-operative societies were established in 1914 in the State of Minas Geraes. These are the Monhuassú Co-operative Society, the Pastoril Oeste de Minas at Oliveira, and the Pastoril Sul Mineira at Passos. This brings up to 40 the number of co-operative societies in the State.

The total amount paid by the State in bounties and grants to the co-operative societies is 556,268 milréis of which 98,514.5 were paid in 1914.

The total amount of the loans made or guaranteed by the State to co-operative societies up to December 31st., 1914, was 645 contos ; the total value of produce exported or sales made by co-operative societies amounted to 44,233,576.965 milréis: from 1908 to September 1st., 1914 the exports amounted to 26,276,147.962 milréis. Of coffee 1;297,728 sacks have been exported.

CANADA.

CO-OPERATION AMONG THE FARMERS ON MANITOULIN ISLAND. — *The Farmers' Advocate*, London, Ontario, Vol. L, No. 1214, December 30th., 1915.

During the year 1915 the farmers on Manitoulin Island in Lake Huron achieved considerable success in selling their produce through co-operative associations. The present co-operative movement started in the winter of 1912 with the formation of four local Farmers' Clubs which succeeded in building up a small business in the collective purchase of seed grain.

In the autumn of 1913 two of the Clubs undertook the co-operative sale of lambs, and a third Club sold small quantities of butter, eggs and potatoes co-operatively, the results in every case being very satisfactory. Farmers in other parts of the Island soon became interested in the new ventures, with the result that seven new Clubs were formed in the winter of 1913. During 1914 a comparatively large business was done in the purchase of clover and grain seed, salt and other supplies, and in the sale of lambs, poultry, pork, potatoes, butter and eggs. Some delay was encountered in obtaining returns for poultry and pork sent to market, and the members in some cases became discouraged and withdrew from the Clubs. This setback, however, really strengthened the co-operative movement by weeding out its lukewarm supporters, and at the beginning of 1915 the Farmers' Clubs were stronger than ever before. In that year the total business done by eleven clubs amounted to $12,687.58, of which $8,692.70 was for supplies purchased and $3,994.88 for produce sold.

This, however, is by no means the whole of the co-operative activities of the Manitoulin farmers. In 1914 the Farmers' Clubs organised the Manitoulin Wool Growers' Association for the purpose of having the wool produced by their members properly graded and sold co-operatively. In 1915 the Association was merged with the Manitoulin Marketing Association which was formed to do a general trading business but which so far has sold only wool and live-stock. The season's wool was carefully graded and each producer was paid strictly according to quality. It had been one of the chief grievances of the producers for a long time that local wool dealers paid a " flat " rate for wool, and that there was thus no inducement to farmers to produce wool of superior quality. The total receipts from wool sales were $ 5,189.57. Lambs were sold f. o. b. the Island the total sales amounting to $ 6,050.31. Cattle and pigs were shipped to Toronto and sold on the market there, the chief saving to members being effected by shipping large consignments instead of a number of small consignments at unprofitably high rates for transport. The sales of cattle and pigs amounted to $ 10,995.66 and the total sales of the Marketing Association, therefore, to $ 22,235.54. As the number of farmers on the Islands is small — there are but little over a thousand in all — and as many of them still take no part in the Farmers' Clubs the results obtained so far are distinctly promising for the future expansion of the Co-operative movement.

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THE ALBERTA FARMERS' CO-OPERATIVE ELEVATOR COMPANY IN 1914-1915. — *The Grain Growers' Guide*, Winnipeg, November 24th., 1915.

The report of the Alberta Farmers' Co-operative Elevator Company for the year ending July 31st., 1915, presented to the shareholders at the third General Meeting held at Calgary on November 17th., 1915, shows that this co-operative association is well supported by the farmers and is making excellent progress. The Company does not confine itself to dealing in grain, but in addition does a large business in the co-operative sale of live-stock and in the co-operative purchase of general farm requisites.

During the year under review, eleven new elevators were constructed, bringing the total number of elevators under the control of the Company up to eighty-seven.

The total amount of grain dealt with in 1914-15 was 5,039,100 bushels, giving an average of 66,000 bushels for each elevator doing business during the year. The Company's co-operative purchase transactions were four times as large as those of the previous year. Seven hundred and five full carloads were purchased and distributed to members, the chief items being flour (222 carloads), hay (178 carloads), coal (50 carloads) and fence posts

(75 carloads). In addition to these 705 carloads the Company purchased for the members 1,600,000 pounds of binder-twine.

The live-stock sales section of the Company dealt during the year with 56,603 pigs, 1,129 cattle and 805 sheep.

The financial report showed a profit on the year's working of $ 28,826.

The main interest in the Directors' report lies in the proposals for the federation of the Company with other farmers' co-operative societies in Western Canada. The Board of Directors have for some time past been trying to arrange working agreements with the other societies but it is already recognised that no informal agreement will suffice and hat a definite federation of interests is necessary. After some discussion in the General Meeting a resolution was passed calling upon the Directors to take such steps as they deem advisable to carry out a plan of federation. The most important of the other societies referred to is the Saskatchewan Co-operative Elevator Company which in July, 1915, completed its fourth year of successful business.

SPAIN.

THE DECISIONS TAKEN BY CATHOLIC AGRICULTURAL ASSOCIATIONS IN FAVOUR OF THE WORKING CLASSES. — *Boletín del Instituto de Reformas sociales*, Madrid 12th. year, No. 139, Jan. 1916. — *Revista social*, Madrid, 15th. year, No. 186, January 1916.

In our February issue we announced to our readers the foundation of the " Catholic Agricultural Confederation of Old Castile and Leon " (1) which took place at one of the meetings held by the Catholic federations of agricultural syndicates at Valladolid on the occasion of the inauguration of the " Casa Social católica " in that city.

We now inform our readers that at another meeting the above-mentioned federations discussed and passed various resolutions tending to attract into the sphere of action of the syndicates that class of wage-earners which now only in exceptional cases belongs to these associations, and to endeavour to improve their condition as far as possible.

The following are the principal resolutions:

(1) To reduce the usual contribution for labourers.

(2) To declare what sum would be sufficient as daily wages, taking into consideration the needs of each locality, while seeking to diffuse the traditional customs of certain districts which would tend to increase wages when crops are good.

(3) To arrange for labourers loans at a low rate of interest to enable them to cultivate a piêce of ground, or to become owners of it.

(1) The Federations of Astorga, Burgos, Ciudad Rodrigo, Leon, Logroño, Palencia, Salamanca, Santander, Segovia, Soria, Valladolid, Murcia, Navarre, and La Mancha have already joined this Confederation.

(4) To establish sections for mutual aid in case of unemployment, illness or accidents in agricultural labour and to institute old age insurance, either through these sections or separately as may seem most convenient.

(5) To procure for labourers the use of ploughs, machines for spraying vines, machines for sorting seeds, and any other machines belonging to the syndicate which may be useful to them, and to lower for their benefit the rate for the hire of such machines.

(6) To devote a part of the profits realised each year by the syndicate to increasing the benefits and insurance which the labourers enjoy and reducing the rate of interest on loans made to them. Should the ordinary profits not permit of this the commission on purchases and sales made in common may be increased and the sum thus obtained be devoted to the purposes named.

Lastly, the Federations decided to grant every year a certain number of money prizes to those federated syndicates which shall do most for the benefit of the labourers in conformity with the resolutions passed by the Federations.

These resolutions of the meeting at Valladolid would be in themselves an eloquent indication of the new direction which Catholic farmers in Spain desire to give to their social action. But another proof of the spirit which animates Catholic agricultural organisations — almost exclusively composed of employers, rarely of a mixed character — in favour of the working classes, is the following significant fact: At the meeting of the Agricultural and the Labourers' Catholic Federations held at Palencia in December, 1915, almost at the same time as the meeting at Valladolid, resolutions of equal importance were passed. Of these we give the chief, specially interesting if compared with those of the Valladolid meeting.

(*a*) To urge the mixed syndicates to make further efforts to solve labour problems ;

(*b*) When mixed syndicates are unable to do this, to form syndicates composed solely of labourers ;

(*c*) Such syndicates to be established with every possible guarantee and security by the successive formation, as far as circumstances permit, of rural loan banks, banks of " resistance", mutual aid banks, distributive co-operative societies, children's mutual societies, and banks for old age pensions ;

(*d*) To solve the question of credit for labourers, the Agricultural Federation shall grant loans to purely labour syndicates in a form similar to that adopted for loans to mixed syndicates ;

(*e*) The two Federations, aiding one another reciprocally, shall next spring join in an active campaign to organise in every locality such institutions as may be most useful; one or other of these federations, or both at the same time, sending representatives to carry on this work.

From the resolutions and decisions just enumerated it will be seen that the question of the hour in the social-agricultural world in Spain is the initiative taken by the catholic element for the improvement of the condition of the wage-earning classes whether by organising them in associations

or by enrolling them in the mixed institutions already existing, or in forming new societies exclusively representing labour.

UNITED STATES.

THE "GRANGE" IN 1915. — *The National Grange Monthly*, Vol XII, No. 12, December 1915.

The " Order of Patrons of Husbandry ", the great farmers' association of America more widely known by its unofficial title of "The Grange," held its Forty-ninth Annual Session at Oakland, Cal., from November 10th., to 19th., 1915.

Delegates attended the meeting from thirty-one states, and among the subjects which came up for discussion two were of more than usual importance — rural credit and co-operation. More time was devoted during the ten days of the session to the problem of rural credit than to any other topic, and after a large number of resolutions had been considered the following were adopted almost unanimously:

(1) That it is the opinion of the National Grange that any legislation for the purpose of bettering farm credits is a part of the great national policy of conservation of the food supply;

(2) That any farm credit association which receives any privilege under federal or state law should be composed of farmers;

(3) That any farm credit plan which does not include a direct reduction of the prevailing rates of interest, as well as a long term of small annual payments upon farm mortgages, will not meet agricultural requirements or materially benefit our farmers;

(4) That no farm credit law which places in the hands of private capitalists the power to make interest rates on mortgage bonds without limitation by federal law will meet either the needs of agriculture or the just demands of the National Grange;

(5) That the Government of the United States shall lend money at a rate not to exceed 4 ½ per cent. to farmers, upon thirty year farm land mortgages, with the addition of an amortisation charge which will repay the principal in that time, provided that not more than $10,000 shall be lent to any one person and that no person owning more than $20,000 shall be able to borrow;

(6) That the Legislative Committee and the officers of the Grange throughout the country are instructed to insist that more substantial Government aid to steady interest and uphold the market for farm mortgage bonds shall be included in any bill finally passed by Congress.

For some years past the Grange as a body has been devoting increasing attention to the subject of co-operation, and at the Oakland session most of the state delegates reported that co-operative purchase and sale or co-operative fire insurance was undertaken by the local or district organisation which they represented. The State Granges and the National Grange

have no official connection with these co-operative enterprises — a fact which, while it prevents the whole organisation becoming involved in schemes which may eventually prove disastrous, makes it difficult to collect any statistics relating to the co-operative activities of members of the Grange. That the National Grange, while anxious that members should co-operate wherever the conditions are favourable, is determined that the Order shall not be saddled with financial liability for any co-operative scheme, is evident from the report which the Committee on Co-operation presented to the delegates. This report points out that business co-operation was not one of the original purposes of the Order, and reminds the members that badly-managed co-operative schemes have once already crippled and almost wrecked the organisation.

The report of the National Treasurer shows that the Order is financially in a very sound position. The invested funds amount to $ 104,233. The receipts for the year 1914-15 were $ 70,402 and the expenses $ 42,880. The largest item in the expenses is a sum of $ 15,000 spent on the work of extending the Order. During the year 502 new local associations known as "Subordinate Granges," were organised, and 20 were reorganised. The National Grange will meet next in its Fiftieth Annual Session in Washington, D. C., where the Order was founded.

GREAT BRITAIN AND IRELAND.

THE COUNTY WAR AGRICULTURAL COMMITTEES AND CO-OPERATION. — Circulars issued to the Secretaries of the County War Agricultural Committees by the Board of Agriculture (November 4th., 1915) and by the Agricultural Organisation Society (November 17th., 1915).

Amongst the functions of the newly formed County War Agricultural Committees (1) is that of encouraging and promoting co-operation amongst farmers for the procuring of supplies and machinery. In this connection the Board of Agriculture issued a circular to the Secretaries of the Committees informing them that the Governors of the Agricultural Organisation Society had offered to place the services of the Society, its branches and its organisers, at the disposal of the Committees for any purpose in which they could render useful assistance.

The circular pointed out that many of the difficulties which face farmers in these times could only be overcome by co-operation. As the Agricultural Organisation Society was the recognised agent of the Board for the promotion of co-operation in agriculture, Lord Selborne (the President of the Board) expressed the hope that the Committees would avail themselves of the offer of the Society as far as possible.

(1) See the February issue of this *Review*, page 109.

Following upon this circular, the Agricultural Organisation Society itself addressed a circular to the secretaries of War Agricultural Committees suggesting the encouragement of co-operation in obtaining labour saving implements, in the purchase of fertilisers, feeding stuffs and farm seeds, in the disposal of produce, in obtaining capital, and securing improved transit facilities. It also suggested the formation of the so-called village war-food societies, the principal object of which is to increase the production of market-garden produce in the cottage and allotment gardens surrounding the towns and villages, as well as in the waste land to be found in some districts.

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THE SCOTTISH MILK RECORDS ASSOCIATION. — *The North British Agriculturist*, No. 6, February 10th., 1906.

A general meeting of the Scottish Milk Records Association was held at Glasgow on January 29th. From the report presented to the meeting on the work of the Association in 1915, it appeared that the number of local societies affiliated to the Association was 35, the total number of herds tested 640, and the total number of cows tested approximately 26,500.

A report was also presented on the prospects for 1916, which showed that six local societies were to be discontinued. In every case the reason assigned was the withdrawal of members owing to the shortage of labour on the farms resulting from the war. Almost all the members willing to continue had been accommodated in other existing societies. The Committee hoped to be able to recommend a sufficient number of qualified women recorders, or of qualified young men ineligible for military service to satisfy all requirements during 1916.

The grants available for 1916 were stated to be as follows : to societies in their first year, conducting 21-day tests or under, £35; to societies in their first and second year, conducting tests over 21 and up to 28 days, £26 5*s.* ; to societies in their third and fourth year, £10.

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A NEW HERD BOOK SOCIETY. — *Agricultural Gazette*, London, No. 2192, January 3rd., 1916.

After several preliminary meetings, the establishment of a Cumberland Pig Herd Book Society was decided upon at a meeting of breeders held at Wigton. It was reported that nearly thirty foundation life-members of £5 each had already been secured, and it was agreed that these should act as the Council for the first year.

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A SIMPLE FORM OF RURAL DISTRIBUTIVE CO-OPERATION. — "A New Departure in Village Co-operation," Leaflet published by the Agricultural Organisation Society, London, 1915.

In the village of Stapleford (Hertfordshire) the local agricultural co-operative society has made an interesting experiment in the co-operative purchase, on simple lines, of domestic requirements (food-stuffs and coal).

The village contains no shop and local requirements were catered for by tradesmen in the neighbourhood. The members of the Society realised that they did not possess the requisite experience for running a co-opera tive store, nor were they prepared to accept the responsibility of doing so. It was decided, therefore, to approach some of the tradesmen who already did business in the village and to ask them whether, if orders for bread and groceries were bulked and payments made weekly by the Society, special terms would be offered. As a result of these negotiations certain tradesmen agreed to quote special terms and business was begun.

The methods of conducting the business are as follows:

The trade is divided into four headings, viz. Groceries, Bread, Corn (feeding stuffs) and Coal. Every six months tenders are invited by advertisement in the local papers for supplies under these headings. In the case of groceries the firm tendering is supplied with a list of the principal articles of consumption in order that prices may be quoted for each. Tenders are invited on the basis of cash prices with a discount to the Society in consideration of bulked orders and weekly payments; delivery by the contractor to the houses of the individual members to be included.

On the contracts running at the time the leaflet was issued (October 1915) the Society was receiving the following discounts: Groceries, 6 ¼ per cent.; bread, 10 per cent.; corn, 2 ¼ per cent.; coal, 1s. per ton.

Each purchasing member, except in the case of their purchase of coal, is supplied with ordinary tradesmen's books, one for each of the different classes of goods. The Secretary and Committee of the Society meet every Friday to receive orders for the coming week and payments for the past week's goods. Each member brings his (or her) tradesmen's books, which contains particulars of the order placed the previous week with the cost of the articles entered in by the tradesmen and totalled; the total is the amount which is paid to the Secretary. In the book is also entered the order for the coming week. The grocery book is retained by the Secretary and forwarded to the tradesman, the bread and corn books being retained by the members. On the day previous to the Committee Meeting the Secretary receives from the various tradesmen their weekly bills showing the amounts due from each of the members, with the agreed discount deducted from the sum total of the bill. This enables the Secretary to prepare a statement showing the amounts due from each member under the different headings ready totalled to save time when collecting, and this also

acts as a check on the members' books. To enable members to check their own books they are supplied with a list showing the prices at which the tradesmen have contracted to supply the various articles.

With the money which is collected on the Friday night the Secretary pays the tradesmen the following day and the balance representing discounts is banked in the Post Office Savings Bank.

Every half-year a distribution of discounts takes place. The Committee deduct a small percentage to cover expenses and allow for a reserve fund and the balance is distributed in proportion to the purchases of each member of each class of goods.

Delivery of goods is undertaken by the contracting tradesmen. Bread is delivered four times a week, groceries once a week, and coal once a fortnight.

If a member prefers to select the goods at the shop, the tradesmen's book is handed back to him after the weekly payment instead of being retained by the Secretary.

The Society started in January, 1913, with a membership of 34 which by October, 1915, had increased to 55. Of this number 48 are purchasing members, and the weekly takings average £20. Almost every house in Stapleford is represented in the membership and eleven members have joined from the neighbouring village of Watton.

RUSSIA.

THE CRISIS IN HOPS AND CO-OPERATION. — Хозяйство (*Economy*), No. 19, May 22nd., 1915.

The cultivators of hops have suffered seriously, partly because of the temporary closing of the frontiers, but more especially because of the prohibition of the sale of alcohol.

While in normal times the price of hops fluctuated between 10 and 30 roubles per *poud*, it has now fallen to 7 and sometimes even to 4 roubles, though the cost of cultivation only varies from 5 to 7 roubles according to the crop and the wages paid.

Agriculturists thus lose at least 2 roubles per *poud*, a loss which is the more serious because falling generally on small proprietors who devote themselves almost exclusively to raising this crop. A loss on the hop harvest represents, therefore, for them a deficit which can in no way be compensated.

The remedy for this state of affairs seems to have been found in co-operation. The growers have combined to form Associations of hop-growers and Co-operative deposit and loan banks.

The associations seek to familiarise their members with the technical and commercial conditions of their trade, while the banks grant to their members the credit of which they have need.

The-hop growers' associations have requested a loan from the Imperial Bank, but the request has not been granted, because the associations, having no guarantee except their own capital, and not that of their members as well, have only a very limited credit. The position of the loan and deposit banks is very different, because they are guaranteed by the whole amount of the capital of their members. They are therefore on a much larger financial basis, and it seems that the Bank would scarcely refuse to open a credit with them.

The banks could then grant credit to their own members, with the hops as a temporary security. But it would be necessary in this case that the hops should be handed over to the banks to be kept in its warehouses or in buildings hired for the purpose till the whole loan is repaid.

The amount of the loan must depend on the market price of the commodity. If the price of hops were high it could be sold, and the amount, after deduction of the loan and the expenses, could be handed over to the growers. In this way the hop grower would obtain the working capital which he requires, in the critical circumstances of this present time, to avert, as far as possible, the ruin which threatens him.

SWITZERLAND.

STATISTICS OF SWISS CO-OPERATIVE SOCIETIES AT THE END OF 1914. — *Schweizerische Blätter für Wirtschafts- und Sozialpolitik*, Berne, 1915-16, No. 9,

At the end of December 1914, Switzerland contained 8,920 co-operatives societies as compared with 6,841 in 1910, being an increase of 2,079 in a period of four years.

These co-operative societies may be divided as follows: 719 distributive societies, 407 water supply societies, 241 electricity societies, 20 lighting societies, 75 miscellaneous distributive societies, 767 societies for the purchase of agricultural requirements, 36 building societies, 1,214 live-stock improvement societies, 143 societies for the employment of machinery in common, 2,334 dairies and cheese-factories, 51 co-operative distilleries, 124 societies for the sale of fruit, wine, cereals and honey, 50 land-improvement societies, 49 mountain pasturage societies, 513 insurance societies, 170 Raffeisen banks, 128 credit and savings societies, 82 industrial co-operative societies for the purchase of machinery, 5 industrial workshops, 4 ferrymen's co-operative societies, and 1,738 miscellaneous societies.

Of the 719 distributive societies, 396 belong to the Swiss Federation of Co-operative Distributive societies, 143 to the Federation of Agricultural Co-operative Distributive Societies of Eastern Switzerland, 27 to the Christian-social Federation "Concordia." The 396 societies affiliated to the Federation of Swiss Co-operative Distributive Societies contain 276,431 members, a number equal in fact to a third of that of the families of Switzerland. These 396 societies have 1,375 branches in 664 communes.

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THE FOUNDATION OF THREE NEW AGRICULTURAL FEDERATIONS. — *Chronique d'Agriculture et d'Industrie Laitière*, No. 4, January 22nd., 1914. — *Emmenthaler Blatt*, No. 11, January 25th., 1916. — *Chronique d'Agriculture et d'Industrie Laitière*, No. 52, December 25th., 1915. — *Journal d'agriculture suisse*, No. 1, January 4th., 1916.

There have recently been established in Switzerland three new agricultural Federations, viz. the *Federation of the Agricultural Syndicates of the Canton of Fribourg*, the *Federation of Dairies of Jura* and the *Union of the Cantonal Groups of Agricultural Co-operative Societies*. The first of these was established for the purchase and sale in common of all descriptions of agricultural produce. To be admitted to the federation, every society must be entered in the Commercial Register, and be organised on the principle of the unlimited liability of its members. It is noteworthy that the Rules of this Federation contain a provision that all the net profits of the working of the association be devoted to a so-called " working " fund. The Federation already contains 10 societies.

The *Federation of the Dairies of the Jura* aims at developing the cheese-making industry, and devotes it specially to supplying the great urban centres with the milk and to the exportation of cheese.

Lastly, the *Union of the Cantonal Groups of Agricultural Co-operative Societies* established under the auspices of the *Federation of the Agricultural Societies of Latin Switzerland* has for its object, especially during the pre sent crisis, the purchase in common of agricultural requirements (manure, seeds, etc.) and the union of the agricultural co-operative societies of Latin Switzerland, hitherto working independently.

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THE FEDERATION OF AGRICULTURAL CO-OPERATIVE SOCIETIES OF EASTERN SWITZERLAND IN 1914. — *Bauern- und Arbeiterbund Baselland*, Oberwil, No. 567, January 22nd., 1916.

The total business done (incomings and outgoings) by this important federation amounted in 1914 to 9,450,647 fr. 98, less than in 1913 by 13,365 fr. This difference is owing to a diminution of trade during the war. On January 1st., 1914, the federation included 180 societies and in the course of that year 8 new societies were added to the number. On the December 31st., 1914, the total number of members was 14,265.

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THE SUPPLY OF MILK BY FEDERATIONS OF DAIRY FARMERS TO DISTRIBUTIVE CO-OPERATIVE SOCIETIES AND TO DEALERS. — *Emmenthaler Blatt*, Langnau, No. 11, January 25th., 1916.

The delegates of the Central Federation of Swiss Dairy Farmers at a congress held on January 17th. at Olten decided to open negotiations with

the Federation of Swiss Co-operative Distributive Societies with a view to making a contract for the supply of milk. A similar contract was to be made with the wholesale dealers. The basis of such contracts was to be that the federations of dairy farmers should supply milk in sufficient quantities both to co-operative societies and dealers, who should on their part engage not to offer for sale milk purchased from unorganised dairy-farmers.

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VALUATION OFFICE OF THE SWISS PEASANTS' UNION. — *Chronique d'Agriculture et d'Industrie laitière*, Fribourg, No. 52, December 25th., 1915; Nos 1, 3 and 4, January 1st., 15th., and 22nd., 1916. *Journal d'agriculture suisse*, Geneva, No. 1, January 4th., 1916.

Dr. Laur, General Secretary of the Swiss Peasants' Union, in a lecture recently given by him to the delegates of the Federation of Agricultural Societies of Latin Switzerland, referred to a new institution connected with the Union, viz. the Valuation Office. This office was to be an advisory body on all matters connected with landed property, with the valuation and transfer of properties, mortgage credit, etc.

NOTICES OF SOME RECENT PUBLICATIONS CONCERNING COOPERATION AND ASSOCIATION.

GERMANY.

SPOHLER : DIE MOLKEREIGENOSSENSCHAFTEN IM VERKEHR MIT DEN SPAR- UND DARLEHNSKASSEN (*The Co-operative Dairies and their Relations with the Credit Societies*). "Molkerei-Zeitung," Berlin, May 22nd, 1915.

In some districts in Germany, the co-operative and private dairies have arranged to make payments to their members and milk-suppliers through a bank or a credit society. This system, of course, presupposes that the person to whom the payment is to be made — the member or milk-supplier — has an account with the bank or credit society in question in order that the transaction may be carried out. It appears from the annual reports of various large co-operative dairies that this method of payment has been fully tried, and that it would be advisable to make it more general, wherever there exists, in the neighbourhood, a credit society.

The question of the payment for milk and the legal obligations relating thereto have more than once been the subject of discussion in various quarters. The German co-operative dairies pay large sums every year to their members and it is certainly interesting from more than one point of view to consider the question of the payment for milk in some detail.

The method generally adopted hitherto has been for the dairy simply to hand the money to the person in charge of the milk-collecting van. The various sums are prepared in advance, so that the driver has no accountancy work to do on his round. In most cases it is the members of the co-operative societies who are the payees and who engage the van-driver to bring them the money for their milk. If the dairy is legally to be regarded as the principal, the van-driver is the agent and must, in the eye of the law, be considered as a messenger. If the member of the co-operative society or the milk-supplier does not receive what is due to him, it is the dairy which must bear the loss. The rights of the member or milk-supplier as against the dairy still exist and only cease when he has received the money and given a receipt for it. In cases where other steps would not be taken, the messenger would be expected, in the event of the loss of the money, to replace the sum out of his own pocket.

There are also certain cases in which the dairy makes the payments through a cashier, who takes the money to the houses of the payees and ob-

tains a receipt in a special book. The rights of the member cease as soon as the receipt is given and the legal situation is the same as in the previous case. It is only in the case of the loss of the money that the dairy can sue the messenger to recover the amount. It may happen also in some cases that certain dairies only pay the members or suppliers personally for their milk. Such cases, however, appear to be exceptional, as the dairies, especially in the plains, have a very large number of suppliers and they have not always time to come and call for their money.

To entrust the payment to the credit societies is generally considered as the best method to adopt. The dairies, in this case, have not the trouble of calculating and preparing the payment for each member, an operation in the course of which it often happens that a mistake slips in.

Moreover, this method has the advantage of developing amongst the members a spirit of economy; on the other hand, it has the further advantage of allowing a method of working which complies with all the requirements imposed by the well-understood principles of association.

According to the most recent statistics of the Imperial Federation of German Agricultural Co-operative Societies, there exist at present in the German Empire 17,773 credit societies and 3,501 co-operative dairies. That is to say that every farmer has the possibility of opening an account with a local credit society and of thus facilitating the payments to be made by the dairies by their means. All possibility of loss is excluded. The keeping of the accounts of the dairies would, moreover, be appreciably simplified. A list of members, with the amounts to be paid to them, could be handed to the Bank or the credit society. The credit society would then credit the amounts to the payees. If the dairy has not a current account with the credit society, it has generally, through the medium of an agricultural society, relations with a Bank with which, in their turn, the credit societies have relations. In that case it would be the Bank to which the list of payments would be handed, and the Bank would carry out the necessary transactions with the credit society. All the transactions involved in making the payments would thus be carried out without any actual cash being used; this would be in accordance with the financial tendencies of to-day which by means of Banks, credit societies, accounts, cheques, etc., endeavour to reduce to a strict minimum the use of cash in monetary transactions. This system has been fully tried and consequently deserves to be generally adopted.

GREAT BRITAIN AND IRELAND.

MATTHEWS (A. H. H.): FIFTY YEARS OF AGRICULTURAL POLITICS, BEING THE HISTORY OF THE CENTRAL CHAMBER OF AGRICULTURE, 1865-1915. London, 1915: P. S. King and Son. 8vo, 431 pp.

In the introduction to this sketch of the history of a body which for fifty years has been the most important organisation in England for safe-

guarding the political interests of farmers, Mr. Matthews points out that until towards the end of the eighteenth century the staple industry of the country was agriculture, and, in the great majority of cases, Members of Parliament were either landowners themselves or members of landowning families. Up to that time there was, therefore, no special need for the farmers to combine for political purposes, and long after the manufacturing classes had increased in numbers and obtained a powerful influence in Parliament, the farmer failed to realise that the necessity had arisen. It was not until 1865 that the Central Chamber of Agriculture was formed, the immediate occasion which gave rise to its establishment being the occurrence of a cattle plague which caused enormous losses. The farmers decided to combine with a view to forcing the Government to introduce compulsory regulations in order to stamp out the disease.

In its efforts to this end the Central Chamber of Agriculture was very successful, and, during its fifty years of existence, it has had a great influence on agricultural legislation. Perhaps its most notable achievement has been the part which it played in obtaining the establishment in 1889 of the Board of Agriculture, but its influence has been exerted in many other matters affecting agricultural interests — local taxation, land tenure, railway rates, agricultural education, etc. Mr. Matthews' book describes in detail the work of the Central Chamber of Agriculture and the record is convincing evidence of the value to farmers of a powerful organization for the protection of their interests.

CARTER (G. R.): Co-operation and the Great War. London, 1915. P. S. King and Son. 8vo. 20 pp.

In this pamphlet (a reprint of an article which appeared in *Co-operation in Agriculture*) Mr. Carter points out the influence of co-operation in reducing the dislocation of trade which occurred in England on the outbreak of the European War and strongly advocates an even wider adoption of co-operative methods, more particularly in connection with agriculture.

Perhaps the most interesting passage is that in which he describes the action taken by the co-operative distributive societies and by their federations, the great Wholesale Societies: "The panic days at the beginning of the War were marked by a rush for obtaining foodstuffs.... In some cases co-operators shared in this panic feeling, so that those responsible for the policy of the co-operative stores had to take protective measures.... The societies as a whole showed a remarkable effort to keep down prices, to reassure their customers, and to avoid the tendencies to the exploitation of prices shown by various private dealers and retailers of provisions. The prices of goods in existing stocks were maintained, and this action tended to steady the retail and wholesale markets considerably... The Co-operative Wholesale Societies adopted a similar prudent and public-spirited policy.

The whole resources of these vast organisations were utilised to ease the situation for the millions of consumers dependant upon the policy of the Wholesale Societies. The action of the latter and of the stores was essentially public-spirited and proved of the utmost value to the whole body of co-operators. And in view of their commanding position in the marketing of necessaries, their policy also steadied the situation to the advantage of the community in general."

Part II: Insurance and Thrift

ITALY.

A RECENT INITIATIVE OF THE NATIONAL INSTITUTE OF AGRICULTURAL MUTUAL INSURANCE: CARE OF CHILDREN OF PEASANTS KILLED IN THE WAR.

SOURCES:

CASALINI (Dr. Mario): L'assistenza agli orfani dei contadini morti in guerra; con modello di statuto per colonia agricola per orfani dei contadini (*Care of Orphans of Peasants killed in War, with Model Rules for an Agricultural Colony for Orphans of Peasants*). Opera Nazionale per gli orfani dei contadini. Rome, 1915.

STATUTO DELL'OPERA NAZIONALE PER GLI ORFANI DEI CONTADINI MORTI IN GUERRA (*Rules of the National Society for the Orphans of Peasants killed in War*). Chiusi, 1915.

Amongst the many and various initiatives taken with a view to mitigate the melancholy consequences of the War we should specially notice that of the National Institute of Agricultural Mutual Insurance (1) for the establishment of agricultural colonies in various provinces of the kingdom for the care of children of peasants who have been killed in the war and to

(1) The National Committee of Agricultural Mutual Insurance, of Rome, with the assistance of numerous Italian organisations, both public and private — co-operative societies, mutual societies and agricultural associations — was recently transformed into "The National Institute of Agricultural Mutual Insurance," obtaining legal recognition. Its object is the establishment in rural districts of institutions for mutual insurance and thrift, and to co-ordinate them with co-operative associations already existing (credit, productive, distributive, etc., societies).

bring these children up to follow the occupation of their fathers. For this object, the National Society for the Orphans of Peasants killed in War (*Opera Nazionale per gli Orfani dei contadini morti in guerra*) was founded in Rome on the 10th. of December, 1915. Its aim is:

(*a*) To give legal assistance to the children of peasants killed in war, with regard to the pensions due to them by law.

(*b*) To encourage the establishment of agricultural colonies in various parts of Italy for the reception of children orphaned of both parents and, later, of those belonging to large, needy families, for their instruction in practical agriculture; the colonies to be autonomous as to their administration.

(*c*) To constitute directly — where the need is most felt — agricultural colonies, or to give assistance to local undertakings.

(*d*) To urge the appointment of a special commission for the purchase of land to form *small rural holdings*, which will be sold, on the amortisation system, to orphans brought up and instructed in the agricultural colonies, so that they may become small proprietors.

(*e*) To urge the intervention of the State in favour of such local colonies or other bodies having the same ends for the help of orphans.

The National Society, having fulfilled its task for the orphans of peasants killed in war will continue its work in favour of orphans of peasants in general.

The income of the Institution will come from the following sources: (*a*) Income derived from assets it may eventually possess; (*b*) annual subscriptions of donor members and ordinary members; (*c*) contributions from special members; (*d*) contributions from honorary members; (*e*) eventual gifts, legacies, temporary grants, and extraordinary income.

It will contain the following classes of members:

(*a*) donor-members; all institutions (*co-operative societies, mutual societies*) whose annual subscription exceeds 50 lire.

(*b*) ordinary members who pay an annual subscription of 5 lire.

(*c*) special members; all the bodies, ministries, provinces, communes, savings-banks, chambers of commerce, organisations and persons paying an annual subscription of not less than 100 lire.

(*d*) honorary perpetual members, bodies and persons who give once for all a sum of at least 500 lire.

Capital furnished by honorary members will be inalienable, and the interest only may be used for payment of expenses of the Society.

The Society will be managed by a General Council, composed of 27 members who will elect from among themselves a president, 3 vice-presidents, and an executive committee composed of the president, the senior vice-president, 5 councillors and a secretary.

Councillors will be appointed for three years, and be eligible for re-election. The members of the Committee will also be appointed for three years. The duties of the Council will be the following: (*a*) To administer the property of the Society: (*b*) to approve the reports and accounts pre-

sented to the general meeting by the executive committee: (*c*) to appoint and confirm in their functions the Secretary and the regular employés.

The duties of the executive committee will be:

(*a*) To taken charge of the management of the Society within the limits of its income:

(*b*) to prepare and submit to the General Council the balance sheet, both provisional and definite:

(*c*) to appoint and dismiss temporary employés:

(*d*) to appoint technical committees for the consideration and examination of subjects of which the initiative appertains to the Society. As we see from Dr. Casalini's publication (1) these colonies are to be essentially homes situated in rural centres, in which the orphans "may find surroundings closely similar to those in which they spent the first years of their lives." These homes are to be surrounded by land, where the inmates will devote themselves to agricultural occupations, "as though they were still living on their father's little farm," under the direction of able and practical managers. The instruction given is to be above all practical; the agricultural colony "is not to be for the giving of diplomas but to prepare strong and skilful cultivators of the soil."

The boys are to learn in the working-school attached all things necessary to make them skilled agricultural labourers and to enable them, later, to manage small rural holdings as farmers, metayers or proprietors.

They are, therefore, to be familiarised with the use of agricultural machines; they will be taught to make small repairs to machines or agricultural implements; they will understand the rearing of cattle, of silk-worms etc., the packing of agricultural produce, and small rural industries.

These colonies are to receive the orphans of peasants, whether day-labourers, métayers, or small proprietors, children orphaned of both parents to have the preference, next those forming part of the largest and most needy families. There will also be accepted at half price (the other half being paid by the widow, relatives or benefactors) orphans, also children of peasants, who are in less needy circumstances.

The age of the orphans may vary from 7 to 15 years. It is estimated that the annual cost for each child will be about 500 lire. The necessary funds are to be furnished by the "Consortiums" composed of groups of provinces, of communes, of various organisations; these consortiums must engage to provide for a certain number of places every year, and their membership of the colony will be constituted by their subscribing the amount of the maintenance payable in respect of those places. The consortium will, in return, have a right to share in the management of the colony, and to propose a certain number of orphans for admission. Small communes and organisations having but limited resources may form amongst themselves a sort of "sub-consortium," paying contributions of small amount

(1) See "Sources" at beginning of this article.

which together will suffice for the maintenance of one orphan ; amongst the bodies so combining, lots will be drawn annually to decide which shall have the right to nominate an orphan for admission to the colony. Private persons may also form maintenance contributions by paying to the " consortiums " described above a sum, the interest of which will be equal to the expense of maintenance of one or more orphans. We shall now give a general outline of the mode of working of the agricultural colonies.

In the first place, the inmates of the agricultural colonies are to be " under paternal care, " lodged, clothed and fed, and they will have everything to satisfy the needs of a frugal life. The supervision will be confided to a director, aided by servants and by the teachers who will give the technical agricultural instruction. The director must be a person of recognised and unquestionable competence, and must assume the entire responsibility of the colony and of the working of the farm. He must fulfil his duties " as a good father of a family, endeavouring to instil into the minds of the pupils the principles of a wise education and the love of agriculture as well as rendering their sojourn in the colony and their work profitable and agreeable, maintaining order, discipline and good management. "

Constant supervision of the pupils, both by day and by night, is to be the duty of the teachers, who under the director, must be responsible for the conduct, the hygiene, attention to work, study, and discipline of the pupils.

As we have already pointed out, the agricultural colony is to replace, as far as possible, the affectionate training the orphans would have had in their own homes, and to impart to them general as well as agricultural instruction. The orphans will be sent according to knowledge and age, to the urban primary schools for elementary instruction. Their course at these schools finished, they will attend the evening complementary classes where ideas of co-operation and mutuality will be specially inculcated, so as to encourage them in thrift and the spirit of solidarity.

On the farm annexed to the Colony they will be taught technical agriculture on objective and demonstrative principles.

The pupils may remain in the Colony until the maximum age of 21 years, but naturally they cannot be maintained at its expense for so long a period ; in fact, they will be placed in positions where they will gradually earn enough to support themselves : according to the development of their capacities, they will be sent to farms and still remain under the supervision of the institution by which they were brought up.

In order that the orphan thus educated may take an active part in the progress of agriculture and that the teaching he has received may not be turned to other ends, it is necessary to train him so that he may attach himself to the land and learn to love it. He must, therefore, return to a little rural commune, and establish himself there. It is proposed, with this object, to give him a home in which he may live with his wife and form a family, and the land which he can cultivate. In other words it is proposed to make the orphan a small proprietor " loving his home and his work, capable of drawing from the soil the greatest possible return, believing in

co-operation and mutual aid, which will give the maximum of strength and social usefulness to the little rural holding."

The National Society for the Orphans of Peasants will urge, with this object, the appointment of a special Commission, which being in communication with agricultural colonies in all parts of Italy (1) shall purchase land to form small rural holdings, to be handed over to the orphans when grown up, these holdings being paid for by instalments spread over a long series of years.

(1) The movement for the foundation of agricultural colonies in Italy promises to be remarkably successful. Such colonies have been already founded or are about to be founded at Città di Castello in Umbria, Vicenza, Rovigo, Genoa, Verona, Bologna, Mantua, Palermo, Catania, Catanzaro, Turin, Rome, Milan, etc.

RUSSIA.

MUTUAL INSURANCE SOCIETIES IN FINLAND IN 1913.

SOURCE (OFFICIAL):

BIDRAG TILL FINLANDS OFFICIELLA STATISTIK; FÖRSÄKRINGSVÄSENDET. FÖRSÄKRINGSINSPEKTORENS BERÄTTELSE ANGAENDE DE LOKALA BRANDSTODS OCH KREATURSFÖRSÄKRINGSFÖRENINGARNAS VERKSAMHET UNDER ÄR 1913 (*Contributions to the Official Statistics of Finland. Insurance. Report on the District and Parish Fire and Livestock Insurance Societies for* 1913). Helsingfors, 1915.

As a sequel to the article which we published in August 1915, on *Insurance Societies of Interest for Rural Economy in Finland*, we now give a summary of the report on the work of small mutual insurance societies in that country during 1913.

§ 1. FIRE INSURANCE SOCIETIES.

In 1913 the fire insurance societies, whose sphere of action extended over less than a province numbered 283. The following table shows how they were divided among the provinces, and gives also the corresponding figures for 1897, 1900, 1905 and 1910.

TABLE I. — *Number of Fire Insurance Societies in* 1897, 1900, 1905, 1910 *and* 1913.

Province	1897	1900	1905	1910	1913
Nyland	11	11	11	12	11
Abo e Björneborg	36	40	41	42	42
Tavastehus	11	11	11	11	10
Viborg	40	43	45	48	50
St. Michael	22	22	22	23	23
Kuopio	31	31	30	30	30
Vasa	64	68	72	74	73
Uleåborg	50	46	54	47	44
Total	265	282	286	287	283

The total amount of the policies issued by these societies was :

At the end of 1912	929,163,142	Finnish marks
" " " " 1913	984,345,554	" "

At the end of 1913 the insurance value of the property insured in Finland amounted to about 4,225,000,000 marks, from which sum are deducted the reinsurances received from other societies. The following figures show the distribution of the sums assured among the several classes of insurance societies. To show with greater clearness the general progress of business, the figures for 1897, 1900, 1905 and 1910 are also given.

TABLE II. — *Total Amount of Sums Assured.*

	1897 Marks	1900 Marks	1905 Marks	1910 Marks	1913 Marks
Large Mutual Societies . .	539,256,206	659,952,105	1,087,648,105	1,618,884,087	1,931,195,924
District and Parish Societies	352,511,270	436,737,520	569,006,331	778,737,748	984,345,554
Finnish Companies	261,365,311	395,246,061	385,769,915	598,582,310	788,755,054
Foreign Companies	190,697,825	248,403,933	219,171,739	269,796,891	261,000,000
Russian Companies (approximate figures)	160,000,000	170,000,000	160,000,000	245,000,000	260,000,000
Total . . .	1,503,830,612	1,910,339,619	2,421,596,090	3,511,001,036	4,225,296,532

These figures show that the district and parish societies possessed at the end of the years considered the following proportion of the total amount of the fire insurance policies :

1897	1900	1905	1910	1913
23.4 %	22.9 %	23.5 %	22.2 %	23.3 %

Of the total amount insured in these societies 68.2 % represents fixtures, and 31.8 % movables.

The number of insurance policies issued by these societies was, at the end of 1913, in all 320,943. During 1913 the increase in the number of policies was 13,240. The average sum assured per policy for the whole Country amounted to 3,067 marks.

The number of losses was 1,899 and the amount of claims paid was 1,173,148 marks. Of this total, the claims in respect of fixtures amounted to 832,917 marks ; those for movables to 340,231 marks. That is 71 % for fixtures, and 29 % for movables.

The following table shows the annual number of fires and the amount of loss resulting per million of Finnish marks of the average amount of all the policies issued in the year :

TABLE III. — *Number of Fires and Amount of Damage.*

Year	Number of Fires	Amount of Damage per Million of Marks of the Average Amount of Sums assured
1897	1,220	3.7
1898	1,165	3.3
1899	1,247	3.2
1900	1,282	3.1
1901	1,480	3.4
1902	1,414	3.0
1903	1,304	2.7
1904	1,435	2.6
1905	1,449	2.2
1906	1,512	2.6
1907	1,345	2.2
1908	1,680	2.6
1909	1,547	2.2
1910	1,560	2.07
1911	1,625	1.97
1912	1,762	1.96
1913	1,899	1.98

In 1913 the number of claims paid per thousand policies was 5.9. The following table shows the monthly distribution of the fires.

TABLE IV. — *Monthly Distribution of Fires.*

January	5.7 %
February	5.3 %
March	6.0 %
April	6.4 %
May	10.4 %
June	8.4 %
July	9.4 %
August	11.3 %
September	11.6 %
October	11.3 %
November	7.6 %
December	6.6 %
	100 %

The following table gives the causes of the fires in 1913 :

TABLE V. — *Causes of Fires.*

Causes	Number of fires	%
Lightning	102	5.4
Explosion	0	0
Spontaneous combustion	10	0.5
Defects in construction	221	11.6
Chimney fire	94	5.0
Smouldering ashes	56	3.0
Negligence of smokers	51	2.7
Carelessness in regard to fire places	229	12.1
Careless use of lamps and combustible oils	52	2.7
Careless use of matches	69	3 6
Other carelessness	187	9.8
Crime	47	2.5
Various causes	213	11.2
Unknown causes	568	29.9
	1,899	100 %

The insurance value of property destroyed by crime amounted to 54,232 marks.

In 1913 the losses during the year amounted to 1.23 marks per 100 marks of the mean total of sums assured during the year. The proportion of loss per 1,000 marks of the annual mean total of sums assured was as follows during the years 1897 to 1912 :

1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1010	1911	1912
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1.62	1.27	1.30	1.28	1.59	1.31	1.09	1.31	1.26	1.28	1.11	1.34	1.06	1.36	1.28	1.26

The premium fixed for 1913 on the basis of the sum for the calculation of premiums at the close of the year was 1.79 marks per 1000 marks. From 1897 to 1910 the average premium was 1.64 marks.

The amount of the premiums collected was 1,909,482 marks. The following table shows the employment of these funds.

TABLE VI. — *Employment of Funds (in marks).*

Claims paid	1,133,039		
Less sums re-insured	83,279	=	1,049,760
Working Expenses			222,690
Re-insurance Premiums			87,268
Extinguishing Apparatus			28,106
Other Expenses			56,652
Total . . .			1,444,476
Balance in hand . . .			465,006

Adding to this balance interest and other receipts which amounted in 1913 to 318,213 marks, we obtain as the total balance 783,219 marks. This sum served to increase the cash and other assets of the several societies.

Comparing, in the case of the district and parish societies, the claims paid, the working and other expenses of the year with the sums assured at the end of the year, it appears that in 1913 for every 1000 marks assured, the claims paid were 1.04 marks, and the working expenses 0.21 marks.

The working expenses which appear in the accounts are very small ; but in comparing them with the same expenses in other societies, it must be noted that these societies are managed by the officials of the commune, who receive no special remuneration for their work, and that the experts' fees, etc., are generally paid directly by the party concerned and so do not figure in the accounts of the societies.

The following figures show the amount in marks of the premiums collected by the various classes of insurance society in Finland, the claims paid and working expenses for the year 1913 :

	Premiums	Claims	Working Expenses
Large Mutual Societies	4,954,402	3,973,679	863,649
District and Parish Societies	1,909,482	1,133,039	222,690
Finnish Companies	2,988,745	1,906,993	558,972
Foreign Companies	963,606	589,060	154,191
Total . . .	10,866,235	7,602,771	1,799,502

A fairly large number of the district and parish societies only assure insignificant amounts. The following Table classifies the societies according to the sums assured by them at the end of the year ; the figures show the number of societies belonging to each class :

TABLE VII. — *Amount of the Policies Issued at the end of* 1913.

Less than 0.5 million marks	10
Between 0.5 and 1 million marks	32
" 1 " 2 " "	70
" 2 " 5 " "	123
" 5 " 10 " "	37
" 10 " 20 " "	7
More than 20 " "	4
Total	283

Of the societies doing business at the end of 1913, 14.8 % assured sums amounting to less than 1 million marks; 68.2 % between 1 and 5 million marks; 13.1 % between 5 and 10 million marks; and 3.9 % above 10 million marks. The corresponding figures at the end of 1896 were respectively 55.5 %, 41.7 %, 2 % and 0.8 %.

As we see, the average amount of the sums assured has increased in these seventeen years and there has been a marked tendency for the groups assuring larger amounts to become more numerous. During the same period the average amount assured has increased from 1,306,000 Finnish marks to 3,478,000 marks. Nevertheless there is still a large number of societies which must be considered as very small. The total amount of the assets of the societies at the end of 1913 was 6,464,458 marks.

In general, however, the situation of these societies from the point of view of their assets, has somewhat improved between the end of 1897 and that of 1913, that is in sixteen years. The average amount of the assets of the societies at the end of the years 1897, 1900, 1905, 1910 and 1913 per 1000 marks assured was calculated as follows :

1897	1900	1905	1910	1913
2.40 marks	3.56 marks	4.90 marks	5.84 marks	6.56 marks

The amount of assets is, however, distributed very unequally among the different societies. To give an idea of this, the societies have been grouped in the following Table according to the amount of their assets at the end of 1913, deducting therefrom the liabilities. The figures show the number of societies belonging to each group.

TABLE VIII. — *Resources of the Societies.*

Liabilities exceeding the assets		7
Without assets or liabilities		0
Excess of assets over liabilities	less than 1,000 marks	9
	Between 1,000 and 5,000 marks	61
	» 5,000 » 10,000 »	47
	» 10,000 » 50,000 »	129
	More than 50,000	30
	Total	283

Most of the societies comprised in the first three are those which (so to speak) live from hand to mouth; their receipts in any year are merely sufficient to cover the expenses of that year. There may easily be a gain or on the contrary a deficit of a few marks.

§ 2. Livestock insurance.

At the end of 1913 there were altogether 121 livestock insurance societies whose action did not extend to an entire province.

Province of Myland	5
» » Abo and Björneborg	7
» » Tavastehus	3
» » Viborg	25
» » St. Michael	5
» » Kuopio	5
» » Vasa	59
» » Uleåborg	12
Total	121

The total amount of the sums assured at the end of 1913 was:

Horses	34,162	of the declared value of	12,026,073 marks
Horned cattle	40,260	» » » » »	4,497,972 »
Other livestock	—	» » » » »	23,673 »
Total			16,547,718 marks

Adding to these figures those of the four societies whose sphere of action extends over the whole country, the livestock insurance in the whole country at the end of 1913 included:

Horses	62,423	of the declared value of	23,344,011 marks
Horned cattle	57,845	» » » » »	7,115,797 »
Other livestock	—	» » » » »	23,673 »
Total			30,483,481 marks

The number of horses insured was 20.2 % of the entire number of horses, and the number of horned cattle only 4.9 %.

Of the local societies 33 only insured horses, 4 only horned cattle, and the other 84 insured both classes of livestock.

From the point of view of the sums assured these societies may be grouped as follows, the figures indicating the number of societies belonging to each group.

TABLE IX. — *Sums Assured by the Livestock Insurance Societies.*

Years	Less than 30,000 Marks		Between 50,000 & 100,000 Marks		Between 100,000 & 200,000 Marks		Between 200,0000 & 500,000 Marks		500.000 Marks and over	
	Number	%	Number	%	Number	%	Number	%	Number	%
1905 . . .	10	17.9	13	23.2	19	33.9	11	19.6	3	5.4
1906 . .	18	23.7	17	22.4	27	35.5	12	15.8	2	2.6
1907 . . .	14	17.5	19	23.8	32	40.0	13	16.2	2	2.5
1908 . . .	16	18.8	17	20.0	31	36.5	19	22.4	2	2.3
1909 . . .	16	17.5	17	18.7	35	38.5	20	22.0	3	3.3
1910 . . .	22	22.0	22	22.0	30	30.0	23	23.0	3	3.0
1911 . . .	22	21.0	25	23.8	35	33.3	20	19.0	3	2.9
1912 . . .	25	22.5	27	24.3	37	33.4	19	17.1	3	2.7
1913 . . .	27	22.3	33	27.3	38	31.4	20	16.5	3	2.5

The number of losses per cent of the total number of head of livestock insured was 1.94 % for horses and 1.33 % for horned cattle. The claims paid amounted in the case of horses to 1.26 % and in that of horned cattle to 1.00 % of the value assured. The average claim paid per horse was 225.49 marks and per head of horned cattle 80.65 marks.

The following table gives a summary of the data for the ten years for which statistics are available :

TABLE X. — *Claims Paid by Livestock Insurance Societies.*

Years	Percentage of losses		Claims per 100 marks assured		Claims paid per loss	
	Horses — %	Horned Cattle — %	Horses — Marks	Horned Cattle — Marks	Horses — Marks	Horned Cattle — Marks
1904	1.67	1.68	1.10	1.00	230.03	55.43
1905	1.77	1.94	0.96	1.08	212.53	52.68
1906	1.60	1.86	1.11	1.18	229.73	55.96
1907	1.63	1.45	0.97	1.00	195.64	62.25
1908	1.65	1.19	1.11	0.87	224.69	68.21
1909	1.74	1.46	1.16	1.00	226.70	65.20
1910	2.03	1.26	1.20	0.93	204.80	71.30
1911	2.31	1.25	1.68	0.97	299.22	76.56
1912	2.21	1.52	1.37	1.06	214.05	71.08
1913	1.94	1.33	1.26	1.00	225.49	80.65

The premiums collected in 1913 were as follows :

Horse Insurance	112,014	marks
Horned Cattle Insurance	28,241	"
Contributions to the Reserve Fund	7,224	"
Unclassified premiums for more than one object. . .	95,852	"
Total . . .	243,331	marks

This total is 1.53 % of the average amount assured for the year.

Other receipts, interest, etc. brought in 19,970 marks to the societies, or 0.13 % of the average amount assured. The total receipts were therefore 263,301 marks or 1.66 % of the average amount assured.

The expenditure was as follows :

Claims paid	188,612	marks	(1.19 % of the sums assured)
Working Expenses . . .	27,693	"	(0.17 % " " " ")
Carried to Reserve Fund	10,778	"	(0.07 % " " " ")
Other Expenditure . .	13,184	"	(0.08 % " " " ")
Total . . .	240,267	"	(1.51 % of the sums assured)

There remains a balance of 23,040 marks.

The working expenses amounted to 11.4 %, other expenditure (expenses of organisation, interest, etc.) to 5.4 % of the premiums collected during the year.

The balance sheets of the societies show that deducting liabilities, a net balance remains of 90,984 marks, or 5.50 per 1000 marks assured at the close of the year. As we see, these societies have not as yet accumulated any considerable assets.

Part III: Credit

SWITZERLAND.

SWISS MORTGAGE BANKS.

SOURCES:

Das schweizerische Bankwesen in den Jahren 1906-1913. Bearbeitet der schweizerischen Nationalbank (*The Swiss Banking System in the years* 1906 *to* 1913. *Report compiled by the Statistical Bureau of the Swiss National Bank*). Berne, 1915 : Stämpli & C.

Weber-Schurter (J.) : Die schweizerischen Hypothekenbanken (*The Swiss Mortgage Banks*), Zurich, 1914 : Füssli.

Stampfli (Dr. Arthur) : Die schweizerischen Kantonalbanken (*The Swiss Cantonal Banks*).

Wetter (Dr. Ernst) : Die Lokal- und Mittelbanken der Schweiz (*The Swiss Local Banks*).

Fivaz (E) : Historique publié à l'occasion du jubilé du Crédit Foncier Vaudois, 1859-1909 (*History of the Crédit Foncier of Vaud, published on the occasion of its Jubilee*, 1859-1909). Lausanne, 1909 : Imprimeries réunies.

Reports and Rules of the various Banks.

For the sources relating to the questions of establishing a Federal Mortgage Bank, see the article on " The Centralization of Banks and the Question of the Establishment of a Federal Mortgage Bank, " published in the *Bulletin of Economic and Social Intelligence*, Year IV, No. 10, October 1913.

§ 1. General remarks.

The social and economic value of mortgage credit has been long known in Switzerland. As early as the 18th. century private savings-banks for public benefit and city savings-banks lent money on mortgage, the aim naturally being to make good investments of capital at little risk.

Thus, private as well as public institutions willingly undertook mortgages for considerable sums. Until 1850 savings-banks represented more than 8 % of all the banking institutions of Switzerland, many of them being under the control and management of the Government, and guaranteed by the communes. These banks, together with private capitalists were suf-

ficient to fulfil the requirements of Swiss mortgage credit up to the time above mentioned.

In 1848 a new era began in Switzerland, through the development of industry and commerce by the impulse given to the making of roads and railways and by the establishment of schools of lower and higher grade, especially those for technical instruction. Banks began to be founded; the cantons created the cantonal banks, semi-official institutions under the supervision of the State, and to these the cantonal governments entrusted all land credit business, particularly in connection with agricultural land.

But the impulse and help given by the State to mortgage credit was not limited to the establishment of mortgage branches in the cantonal banks or of independent State mortgage institutions; several of the cantons acquired a direct interest even in the private mortgage banks through the purchase of a considerable number of their bonds.

The causes which led to the founding of special mortgage banks will be found in the passage of individual credit into that organised on a legal basis. The private capitalists who hitherto willingly and almost exclusively invested their money in mortgages, withdrew it little by little in order to buy State securities, railway shares or shares in industrial, commercial and banking undertakings.

It is clear that landed property suffered much by this change. The savings banks and the few cantonal banks could not meet all the requirements. It was this new state of affairs which led to the foundation of special mortgage-banks.

***

There are at present in Switzerland twenty Banks which devoted themselves almost exclusively to land-credit business. They are the following placed in chronological order according to date of foundation.

Aktiengesellschaft Leu & Co. at Zurich,
Hypothekarkasse des Kantons Bern at Berne,
Caisse Hypothécaire du Canton de Genève at Geneva,
Basellandschaftliche Hypothekenbank at Liestal,
Aargauische Hypothekenbank at Brugg,
Thurgauische Hypothekenbank at Frauenfeld,
Caisse Hypothécaire du Canton de Fribourg, at Fribourg,
Crédit Foncier Vaudois, at Lausanne,
Einzinserkasse des Kantons Luzern at Lucerne,
Crédit Foncier Neuchâtelois at Neuenburg,
Hypothekenbank in Basel, at Bâle,
St. Gallische Hypothekarkassa, at St. Gall,
Hypothekarbank in Winterthur, at Wintherthur,
Hypothekarbank Lenzburg, at Lenzburg,
Banque Foncière du Jura, at Bâle,
Schweizerische Hypothekenbank at Soleure,

Caisse Hypothécaire et d'Epargne du Canton du Valais at Sitten,
Schweizerische Bodenkredit-Anstalt at Zurich,
Centralschweizerische Hypothekenbank at Lucerne,
Bodenkreditbank in Basel, at Bâle.

This list does not include the cantonal banks, nor savings-banks, nor the many mixed banks which under various forms and within certain limits transact mortgage-credit business.

The chief object of all these banks is to furnish land credit to the Swiss people under the best possible conditions, and, on the other hand, to afford within the country a good means of investment for free capital and for savings.

The history of the foundation of one of these banks is, on the whole, the same as that of all the others. The legal form usually depends on the legal position of the bodies by which they were founded. Four were founded by their respective Cantons as State banks with State grants, guarantees and supervision. Two arose as share companies under cantonal law, the State reserving the right to a voice in their management and to supervise their working. One had the character of a State institution in the method of financing it, its management and supervision, but it was afterwards converted into a share company. The 13 remaining banks, which were established through the initiative of private individuals, are share companies. One of these 13 was originally a co-operative society with limited liability.

The extent of the territory in which each of these banks carries on business is comparatively small, and in the great majority of cases it is limited to the canton in which the bank is situated ; this is always the case with the State institutions, for which the law contains specific regulations to this effect.

The Swiss private mortgage banks are founded on the basis of the law and of the rules. The law establishes the legal basis; the officers and managing committees draw up the rules as they please within the limits prescribed by the law, and fix the regulations for carrying on the business. In the case of the State institutions, on the other hand, the law generally lays down also the details. It is well to mention that Switzerland does not possess, like Germany and Austria, any federal legislation on mortgage banks, nor is there any monopoly of land credit as in France.

In the legal constitution of all institutions, and in all technical and political questions relating to them, the characteristics of the different parts of the country and of the people are reflected. The provision by which the law fixes in several cantons the maximum rate of mortgage interest does not tend to the progress of national economy (1).

(1) For instance, this is the case in the cantons of Lucerne and St. Gall, where the maximum rate is fixed at 4 % and in the canton of Neuchâtel, where it was formerly limited to $5\,^1/_2$, but has lately been raised to $5\,^1/_2$ %. See *Bulletin Financier Suisse*, Lausanne, No 2, 8th. January, 1916.

§ 2. Origin, progress and results of mortgage banks in Switzerland.

In chronological order the Share-Company, Leu & Co. (*Aktiengesellsschaft Leu und Co.*) of Zurich, founded on the 13th. April, 1755, is the oldest mortgage institution in Switzerland.

At present, however, Leu and Co. have to a certain extent lost the characteristics of a mortgage bank through the transformation of the company into a mortgage and commercial bank, with a tendency to a special extension of the commercial branch, and also through the foundation of the cantonal bank, which has to a certain extent taken the place of the company in question as regards mortgage credit in country districts.

We shall not here dwell on the history of this institution, which for our purpose has comparatively little interest. We shall only remark that after the foundation of the cantonal bank, Leu and Co. made mortgage loans to increasingly large amounts beyond the limits of the canton, and during the last twenty years, even in Germany.

The following figures show the importance of this company, and its large share in transactions of mortgage credit :

	1883	1896	1912
Balance	Fr. 43.2 millions	Fr. 74.4 millions	Fr. 251.5 millions
Capital	» 14 »	» 14 »	» 36 »
Value of mortgages .	» 26.2 »	» 50 »	» 142.5 »

The Mortgage Bank of the Canton of Berne (Hypothekarkasse des Kantons Bern) was founded under the law of November 12th., 1846, and is therefore, in order of time, the second mortgage bank in Switzerland. But it is the first in respect of the amount of capital invested in mortgages, which at the close of 1912 amounted to the very considerable sum of 273,000,000 frs. It is now, as it has always been, the model of a State bank pure and simple, whether as regards its foundation, organisation, transaction of business, or management. But it may also be considered a mortgage bank pure and simple.

The facilities and advantages which the Canton of Berne has derived and continues to derive from this bank are of great importance. Through the exemption from the payment of State and Communal taxes granted to the capital and income of the bank, its economic capacity has been increased; as it grants mortgage credit on favourable terms, agriculture has been much benefited, and throughout the canton, which is mainly agricultural in character, land has risen in value. The peasants especially, for the discharge of debts on their land, have derived great advantage from the regulation which makes it obligatory to repay the debt in instalments and fixes the amount of the annual payments, as well as from that which assures the possibility of a more rapid repayment.

One regulation, unique in the history of Swiss mortgage banks, should be noted, viz., that by which the communes of the canton give guarantees to the Mortgage Bank for the mortgage loans granted to proprietors of land situated within the respective communal limits; this regulation procures for the bank almost unlimited credit, while, on the other hand, the creditor of the bank has obtained therefrom the greatest possible security for his deposits.

Lastly, through the reduction by law of the capital tax for debts chargeable on property up to 25 times the amount of the interest of the debt, landed property is considerably relieved. The payment to the State by the Mortgage Bank of the income tax, instead of such payment being made by all the creditors each for the amount standing to his credit in the bank, has relieved nearly all classes of society, and more especially small depositors, from a not inconsiderable burden.

From what has so far been said it will be evident that the Mortgage Bank of the Canton of Berne during the 70 years of its existence has contributed largely to the welfare of the State and of its population, more especially of the agricultural classes and that it will also in the future be called upon to continue its beneficent action in this direction.

We now give the most significant figures for this bank.

	1863	1896	1912
Balance	Fr. 68.5 millions	Fr. 120.7 millions	Fr. 292.4 millions
Foundation capital .	" 12.9 "	" 29 "	" 24 "
Value of mortgages	" 61.9 "	" 117 "	" 273.5 "

In this case also the figures show the position at the end of each year.

The *Mortgage Bank of the Canton of Geneva* (Caisse Hypothécaire du Canton de Genève) founded in 1847 is a State institution.

It was established by a law in 1846 confirmed by further legislation in 1868, 1886, and 1911. Its object in the first place is to administer communal property, in the second to receive and administer money, paying interest on it, and lastly to grant mortgage loans. The foundation capital is now 5 millions of francs, divided into 30,000 shares (*Anteilscheine*) which are held by 48 communes of the canton. The number of shares held by each is fixed by law, and is not always the same. The City of Geneva, the largest holder, has 13,306 shares, and the commune of Aire-la-Ville, the smallest, has 60 shares. The management is entrusted to a Committee consisting of 18 members elected by the State Council of the Canton of Geneva the Municipal Council of the City of Geneva, and the Assembly of Delegates from the 48 communes.

The somewhat original organisation of this bank is due to historical causes, which it would be too long to enumerate here.

The chief characteristics of this institution are the following: on the one hand foundation by the State, rules sanctioned by law, right of State to a voice in the appointment of the bank officials, obligation on the part of the bank to give account of its administration to the Great Cantonal

Council; on the other hand, formation of capital by the communes and their very considerable influence in the appointment of the bank officials, the absence of all State guarantee for the obligations assumed by the bank, and the renunciation by the State of any share in the profits.

For all these reasons the Mortgage Bank of the Canton of Geneva departs somewhat from the type of a State bank pure and simple. Owing to the special conditions under which it arose, it has assumed the form rather of a mixed company.

The following figures show the position of the bank at the end of each year:

	1883	1896	1912
Balance	Fr. 30.1 millions	Fr. 37.5 millions	Fr. 113.1 millions
Foundation capital .	" 2.4 "	" 3 "	" 5 "
Value of mortgages	" 26.7 "	" 31.5 "	" 104.4 "

In the canton of Baselland was founded in 1849 the *Mortgage Bank of Baselland at Liestal* (Basellandschaftliche Hypothekenbank in Liestal) which has hitherto shared with the cantonal bank the mortgage credit transactions of the canton. This bank is at present only a purely industrial and independent institution, though at the time of its foundation and in its earlier days, the State had a certain right to a voice in its management.

The first regulations of the Bank date from the 23rd May, 1849; they show that the foundation capital was divided into 800 shares, each of the value of 250 francs, the total being 200,000 francs. Of these 800 shares 720 were to be purchased at the nominal value by private individuals, preference being given to inhabitants of the canton, and the remaining 80 were taken by the canton of Baselland. Rule 18 declared the bank to be an institution of public utility, and as such, subject to supervision by the State.

In the course of time many changes were made in the rules; in accordance with modern requirements those provisions were abolished which limited the sphere of the bank to mortgage transactions in the canton only.

The Bank has been very successful and there are now branches at Bâle and at Gelterkinden, and agencies at Frick and Langenbruck.

The following figures show the position of the bank at the close of each year indicated:

	1883	1896	1912
Balance	Fr. 26.1 millions	Fr. 30.3 millions	Fr. 65.9 millions
Share capital. . .	" 2 "	" 3 "	" 8 "
Value of mortgages	" 24.6 "	" 29.1 "	" 62.3 "

The *Mortgage Bank of the Canton of Argau at Brugg* (Aargauische Hypothekenbank in Brugg) is an offshoot of the previously existing Loan and Deposit Bank at Brugg. It was founded on the 10th. April, 1849, under

the auspices of the " Society for the Promotion of Culture " of the district of Brugg, in the form of a co-operative society with limited liability, but speculatinve in character, with the object of developing industry and economy through saving and wise investment of money.

On the 10th. April, 1910, this Loan and Savings Bank was converted into a share company, because a co-operative society can easily refund its own working capital, and therefore cannot have the legal qualifications necessary for the working of a bank : another reason for the change was the desire to extend the sphere of operations of the institution.

The rules of the new company and the limits assigned to its sphere of operations show clearly that it is of a mixed character, dealing both with mortgages and commercial credit.

At the close of 1912 three-fourths of the general assets of this bank were in mortgages ; in the new rules mortgage credit transactions take the first place amongst the objects; for these reasons, and until commercial credit shall predominate over mortgage credit in this bank, it must be classed among mortgage credit institutions.

In 1913 the Mortgage Bank of Brugg absorbed the Savings Bank of Rheinfelden and the Loan and Savings Bank of Möhlin, establishing a branch in the first locality and an agency in the second, thus considerably extending its own sphere.

The following figures show the position of the bank at the close of each year indicated :

	1883	1896	1912
Balance	Fr. 3.7 millions	Fr. 7 millions	Fr. 33.9 millions
Co-operative capital owned by share holders	" — "	" — "	" 5 "
Value of mortgages	" 2.8 "	" 4.2 "	" 21.2 "

The Mortgage Bank of Thurgau at Frauenfeld (Thurgauische Hypothekenbank in Frauenfeld) with branches at Arbon, Kreuzlingen, Romanshorn and Weinfelden, founded on the 7th. November, 1851, began its work as the first banking establishment of the canton on the 1st. January, 1852.

From its financing and organisation it is clear that this institution was modelled according to the Mortgage Bank of Baselland. It was founded with an original capital of one million francs, the State participating to the extent of 800 shares of 500 frs. each. The remaining 1,200 shares were purchased by private individuals at the nominal value. But, as in the case of the Mortgage Bank of Baselland, the State did not pay cash, but only gave a guarantee for the amount.

The participation of the State was thus reduced to a limited guarantee, from which the bank could not derive a working capital, and for this reason the bank had no obligation to the State, either regarding dividends or interest. The rules of the company, therefore, confine themselves to giving

to the State a right of supervision, and a voice in the appointment of the bank officials.

We shall not enter further into the subject of the constitution and organisation of this institution, nor yet into its stormy history, because on the 1st. January, 1914, it was absorbed by the Swiss Mortgage Credit Institution (Schweizerische Bodenkredit-Anstalt). It was a mixed mortgage bank, and was legally a private institution; though its rules of the year 1896 (in Rule 2) admit of supervision by the State, this has entirely disappeared of late.

We now give some figures showing its position :

	1883	1896	1912
Balance	Fr. 37.2 millions	Fr. 84.8 millions	Fr. 210 millions
Share capital . . .	" 3 "	" 8 "	" 20 "
Value of mortgages	" 27.7 "	" 57 "	" 164.6 "

As already stated the Mortgage Bank of Thurgau was amalgamated on the 1st. January, 1914 with the Swiss Land Credit Institute. This measure was adopted because the money of the bank was not circulating sufficiently and the increasing mistrust of its creditors was shown by a considerable withdrawal of capital when it was found that a series of investments of doubtful value had been made, chiefly abroad. This state of affairs led the managers of the bank to give up its independence.

The *Mortgage Bank of the Canton of Fribourg* (Caisse Hypothécaire du Canton de Fribourg) is a share company, founded by the cantonal law of the 5th. December, 1853, with a capital of one million francs. By this law the State took one-fifth of the shares, and assured to itself the right of supervision and representation in the board of management. This provision is still in force, and the objects of the company and the district in which it works remain unchanged : mortgage loans on land in the canton of Fribourg, with or without obligatory repayment by instalments. The institution has had a great and continuous success, but at the end of 1912 only the seventh part of its capital was invested in loans in the canton. At that date the amount of this capital was officially stated to be 280 millions. For this bank, as for the others, we give figures showing its position at the close of the years indicated :

	1883	1896	1912
Balance	Fr. 24.1 millions	Fr. 23.8 millions	Fr. 41.8 millions
Share capital . . .	" 3 "	" 3 "	" 6 "
Value of mortgages .	" 22.1 "	" 22.3 "	" 39.5 "

The *Land Credit of the Canton of Vaud at Lausanne* (Crédit foncier vaudois à Lausanne) the fiftieth anniversary of the foundation of which occurred on the 1st. July, 1909, has developed to a remarkable extent. During its first fifty years it granted and paid 54,000 loans, the amount of which

exceeded 400 millions of francs. At the end of 1908 the 170 millions of outstanding mortgages of this institution represented about 38 % of the total mortgage indebtedness of the canton ; at the end of 1912 the value of the mortgages was 225 millions of francs, forming 45 % of the total mortgage indebtedness of the canton.

To this institution, which has enforced the compulsory repayment by instalments, is due in large measure the credit of the fact that the mortgage indebtedness of the Canton of Vaud is comparatively small.

The total amount of this debt on the January 1st., 1908 was 454,252,556 frs. representing only 33 % of the total registered valuation, 1,479,771,739 frs.

The Canton of Vaud has always taken an interest in the welfare of this institution which has been able at any time to count upon State aid. The State has entrusted it with the administration of the Cantonal Savings Bank in order that the money there deposited may be invested on favourable terms in mortgage loans. The Savings Bank, which has agencies in 25 localities in the cantor, had at the end of 1912 a capital of 104 millions in savings deposits, guaranteed by the State.

The Land Credit has legally the form of a private enterprise — a credit institution based on share-capital. But the State has always had a considerable voice up to the present time both as regards its establishment and administration.

It was founded on the 1st. December, 1858, by a State decree under the name of " Caisse hypothécaire d'amortissement, " re-organised the 15th. August, 1874, under the name of " Caisse hypothécaire cantonal vaudoise, " and assumed its present appellation " Crédit foncier vaudois " in accordance with a resolution of the Great Council on the 1st. July, 1904. The State holds shares in the bank, but is never the largest shareholder. Its influence is manifested in other ways; it has a majority of votes in the managing bodies of the bank, and possesses various rights of control and sanction. It guarantees to the shareholders a dividend of 4 %.

The balance sheets of 1883, 1896 and 1912 give the following figures at the close of each year :

	1883	1896	1912
Balance	Fr. 51.7 millions	Fr. 82.1 millions	Fr. 243.8 millions
Share capital . . .	" 9.5 "	" 12 "	" 24 "
Value of mortgages .	" 46.4 "	" 73.7 "	" 225.1 "

In 1859 the *Einzinserkasse des Kantons Luzern* was founded for the Canton of Lucerne. Being the only institution of its kind, it may be well to give particulars of its aims and the special conditions under which it arose. It was founded as a true State institution guaranteed by the State, for the purpose of relieving the peasantry from the mortgage burdens on their land. As a State mortgage bank it has, therefore, special attributes of great importance as regards national economy. The peasantry may apply to this bank for financial assistance on favourable terms for the purpose of simplifying the often complicated state of their mortgages, while the bank at

the same time endeavours to create, in the interest of all concerned, a greater clearness as to their legal position, to the advantage also of the land register. The institution renounces all profit whatsoever to itself (for which reason its foundation capital bears an interest of 4 % and any eventual surplus passes to the State) and is chiefly engaged in the redemption of small debts for the rural population of the canton, to whom during its long period of existence it has rendered important services.

Its financial situation is shown in the following table :

	1883	1896	1912
Balance	Fr. 9.1 millions	Fr. 9.7 millions	Fr. 17.4 millions
Foundation capital .	" — "	" — "	" 2 "
Value of mortgages.	" 8 "	" 8.5 "	" 14 "

The *Land Credit of Neuchâtel* (Credit foncier Neuchâtelois) was founded in March, 1863, at Neuchâtel, and was modelled on the Crédit Foncier of France, the rules of which it adopted almost textually. It is a share company with a tendency to speculation.

Its share capital was fixed by its rules at two million francs divided into 4,000 shares of 500 frs. each, the half of which were immediately allotted. The need of a bank of this nature in the canton was proved by the fact that on the first day when 2,000 shares were offered to the public, a total of 762 subscribers applied for 8,938 shares, causing a remarkable reduction to take place in the number of shares allotted to each subscriber. In allotting the shares particular attention was given to the subscriptions of smaller amount.

Immediately after the closing of the first balance sheet on the 31st. December 1864, it was able to invest three millions in mortgages, of which $^9/_{10}$ ths were repayable by instalments.

Mortgages of this nature became the normal form of the mortgage business of this bank, which established 12 agencies in different places in the canton.

The following figures show the rapid development of this institution.

	1883	1896	1912
Balance	Fr. 16.6 millions	Fr. 15.8 millions	Fr. 41.4 millions
Share capital . . .	" 3 "	" 3 "	" 4 "
Value of mortgages.	" 13.4 "	" 13.1 "	" 36.3 "

In the same year (1863) the *Mortgage Bank of Bâle* (Hypothekenbank in Basel) was founded. It is a share company with an authorised share capital of 10 million frs. of which 7 millions are paid up. Its aim is that common to all these institutions, viz. to place money at the disposal of landed property on first mortgages. Its sphere of operations, besides Bâle City, includes those cantons of Switzerland which offer sufficient legal guarantees for mortgage business, also the adjoining foreign territories, that is to say, Baden and Alsace (see Rule 7 of the Rules of 1910).

The following figures show the situation of the company at the close of each of the three years mentioned:

	1883	1396	1912
Balance	Fr. 33.5 millions	Fr. 44 millions	Fr. 75.6 millions
Share capital . . .	" 2.5 "	" 5 "	" 7 "
Value of mortgages .	" 32.4 "	" 43.1 "	" 72.5 "

In 1863 also the *Mortgage Bank of the Canton of St. Gall at St. Gall* (St. Gallische Hypothekarkassa in St. Gallen), was established as an offshoot of the Bank of St. Gall for the benefit and at the risk of this Bank and of the Corporation of Merchants, represented by its directorate. In consequence of the decision of the shareholders on the 6th. of May, 1864, the Mortgage Bank of St. Gall was taken over by the Cantonal Bank of St. Gall. Its affairs were, however, kept distinct and separate from those of the Cantonal Bank. For the purpose of keeping its money in circulation, and to enable the public to participate in the enteprise, the Mortgage Bank issued 4,000 shares of 500 frs. each. These two million frs. formed the nucleus of a working capital and likewise a guarantee to the creditors of the Mortgage Bank; whilst the Bank of St. Gall at the same time guarantees to the holders of these shares, besides the capital, interest at 4 %.

To confine ourselves to the principal points in the history of this institution, we shall only mention that it has had always to contend against two obstacles which threatened its very existence, obstacles and difficulties caused by antiquated and irrational legislation. They are the maximum rate of interest fixed by law on mortgages, and the cantonal Savings Banks Law. The maximum rate of interest was such that the bank had to content itself with a margin of profit so small as to render its existence precarious, even with the utmost economy in working. The Cantonal Savings Banks Law, on the other hand, tended appreciably to diminish the savings deposits entrusted to the Bank. In 1906 a new state of things arose: the Bank of St. Gall was amalgamated with the Swiss Credit Institute (Schweizerische Kreditanstalt); contemporaneously the Mortgage Bank was formed into an independent share company with a share-capital of 5 million frs. dating from 1st. January, 1907.

The situation of the company at differents periods was thus:

	1883	1896	1912
Balance	Fr. 12.3 millions	Fr. 13.9 millions	Fr. 40.6 millions
Share capital . . .	" 2 "	" 2 "	" 5 "
Value of mortgages .	" 11.9 "	" 13.6 "	" 36.2 "

At the end of 1865 in the Canton of Zurich, beside the Share Company of Leu and Co., was established a second mortgage institution — the Mortgage and Savings Bank of Winterthur, which since 1875 bears the name of *Mortgage Bank of Winterthur* (Hypothekenbank in Winterthur). The

transactions of this bank are limited to the canton and are confined almost exclusively to urban mortgage credit. For this class of business a branch was founded at Zurich in 1895. The needs of land credit in the country are supplied by the Cantonal Bank and the Savings Banks.

The progress of the Bank is shown by the following figures:

	1883	1896	1912
Balance	Fr. 28.7 millions	Fr. 57.1 millions	Fr. 97 millions
Share capital . . .	" 8 "	" 10 "	" 15 "
Value of mortgages .	" 22.7 "	" 52.2 "	" 91.1 "

In April, 1868, was founded the Mortgage and Loan Bank of Lenzburg with a view chiefly to improving and maintaining agricultural credit. From 1912 it has borne the name of *Mortgage Bank of Lenzburg* (Hypothekarbank Lenzburg). Its foundation capital was 500,000 frs. divided into 5000 shares of 100 frs. each. Its working was restricted to the canton, and its "rules for transaction of business" directed attention to the small and very small requirements of the essentially agricultural population. For the repayment of the mortgage loans an annual instalment of at least 1 % of the capital was prescribed.

In the course of time its sphere of action was, in accordance with its rules, widened and adapted to modern requirements. In its working mortgage credit always took the chief part. The following figures show its development.

	1883	1896	1912
Balance	Fr. 4.6 millions	Fr. 10.5 millions	Fr. 23.8 millions
Share capital . . .	" 0.5 "	" 0.75 "	" 2 "
Value of mortgages	" 3.4 "	" 0.3 "	" 20,9 "

The *Land Bank of Jura* (Banque foncière du Jura) was founded on the 3rd. July, 1879, at Delsberg (Canton of Berne) as a share company with the general view of granting loans on the security of land or of Government securities. About 1890 this bank was transferred to Bâle. It is impossible to say in what proportion it may have co-operated and continues to co-operate in supplying the needs of land credit in Switzerland. It is on the other hand known that it has transactions in mortgage credit to a considerable extent in France and Germany. It tends to speculation, and the figures given below must not be taken as a basis on which to found a judgment on Swiss land credit.

	1883	1896	1912
Balance	Fr. 12.9 millions	Fr. 46.9 millions	Fr. 59.7 millions
Share capital . .	" 4 "	" 8 "	" 8 "
Value of mortgages	" 8 "	" 45.7 "	" 49.3 "

The *Swiss Mortgage Bank of Solothurn* (Schweizerische Hypothekenbank in Solothurn) is a share company formed to carry on mortgage credit business of all descriptions in Switzerland. Its development is shown as follows:

	1896	1912
Balance	Fr. 10.3 millions	Fr. 12.8 millions
Share capital . .	" 1 "	" 2 "
Value of mortgages	" 9.9 "	" 11.4 "

In virtue of a decree of the Great Council of the Canton of Valais of the 24th. of August, 1895. the first banking institution was founded in this canton with its head quarters at Sitten.

It bears the name of the *Mortgage and Savings Bank of the Canton of Valais* (Caisse Hypothécaire et d'Epargnes du Canton du Valais). It was established to encourage saving in the canton, and to assist agriculture by means of mortgage loans on favourable terms. It was granted a million francs by the State; this foundation capital was afterwards increased by the emission of a State loan of two million frs.

To promote the development of this institution the State decreed its exemption from taxes for a period of twenty years, in the canton as well as in the communes. It is completely managed and controlled by the State. On the other hand the State gives no guarantee except for deposits. We must observe that the law decrees that the original capital and the money derived from the issue of bonds must be invested in mortgages; as to other money there is full liberty. In a word the bank in question is an institution for mixed credit. It has agencies in six communes of the canton.

The following table shows the course of its development.

	1896	1912
Balance	Fr. 1.6 millions	Fr. 18 millions
Original capital . .	" 1 "	" 1 "
Value of mortgages .	" 0,5 "	" 9,4 "

The *Swiss Land Credit Institute* (Schweizerische Bodenkreditanstalt) was established on 1st. January, 1907, through the initiative of the Swiss Credit Institute (Schweizerische Kreditanstalt) which transformed the Mortgage Bank of Zurich (Hypothekarbank Zürich) founded in 1896 as a second mortgage institution in Zürich into the Swiss Land Credit Institute of which we are speaking. After its transformation it lost its local character and extended its sphere of operations to the whole of Switzerland. By its constitution, it belongs to the class of mortage banks pure and simple, and it carries on credit business in all the Swiss cantons.

Its development has been remarkable:

	1883	1896	1912
Balance	Fr. 2.5 millions	Fr. 97.9 millions	Fr. 102,4 millions
Share capital. . . .	" 1.5 "	" 10 "	" 12 "
Value of mortgages .	" 1 "	" 85.7 "	" 91.6 "

With a view to separate its purely mortgage credit business from all business which it carried on the Bank of Lucerne (Bank in Luzern) founded on the 11th. February, 1909, the *Mortgage Bank of Central Switzerland* (Centralschweizerische Hypothekenbank) at Lucerne in the form of an independent share company.

Its share-capital is 4 million frs. divided into 4000 shares, of which half the nominal value is paid up.

This bank, as its name indicates, transacts business at the present time only in Central Switzerland. With the absorption of the Bank of Lucerne by the Swiss Credit Institute the interests which the Bank of Lucerne had in the Mortgage Bank passed to that Institute.

At the present time, the Mortgage Bank of Central Switzerland is managed by the Lucerne branch of the Swiss Credit Institute.

The accounts of the Bank show the following considerable increases:

	1909	1910	1911	1912
Balance . . .	Fr. 4.8 millions	Fr. 6.1 millions	Fr. 7.4 millions	Fr. 12.3 millions
Share capital	" 1 "	" 2 "	" 2 "	" 2 "
Value of mortgages.	" 1,1 "	" 2.8 "	" 3,5 "	" 8.6 "

The most recently formed institution for mortgage credit and the twentieth and last under consideration in this article is the *Land Credit Bank of Bâle* (Bodenkreditbank in Basel).

It was founded on the 10th. of January, 1910, with a nominal share capital of 10 million frs. of which six millions and a quarter are paid up. It was established under the auspices of the Swiss Banking Association of Bâle and of the " Süddeutsche Diskonto-Gesellschaft A. G. " of Mannheim for the purpose of carrying on mortgage credit business in Switzerland and other countries. We give for this bank also the most significant figures of its accounts for three years:

	1910	1911	1912
Balance	Fr. 13.2 millions	Fr. 18.9 millions	Fr. 27.8 millions
Share capital. . . .	" 6.25 "	" 6.25 "	" 6.25 "
Value of mortgages .	" 8 "	" 14.8 "	" 23.5 "

***

Such are the constitution and development of Swiss mortgage credit traced in a general and comprehensive manner. In the following paragraph we shall briefly explain the present general condition of the mortgage banks of Switzerland, endeavouring to restrict to a few tables the more important figures illustrating the subject.

§ 3. Present position of the mortgage banks in Switzerland.

As we observed in the last paragraph, we shall now give the most important figures respecting the present position of mortgage banks in Switzerland. The statistics here given enable us to follow the development of the institutions in question from 1883 onward ; for the period between 1883 and 1902, the years 1883 and 1896 have been chosen as most significant and as being the years in which the two national exhibitions at Zurich and Geneva were held. For the ten years from 1903 to 1912 every year is given.

The total value of the mortgages of all the twenty mortgage banks in Switzerland at the end of the years given below was as follows:

1883	Fr.	338,766,102.16	1907	Fr.	1,041,589,466.57
1896	"	581,292,463.52	1908	"	1,124,401,579.55
1903	"	809,866,237.89	1909	"	1,214,429,282.11
1904	"	862,964,536.46	1910	"	1,327,269,186.48
1905	"	908.647,659.58	1911	"	1,421,589,534.19
1906	"	975,497,463.91	1912	"	1,492,985,026.15

The value of the mortgages in 1912 was

184 % of that in 1903
257 % " " " 1896
440 % " " " 1883

It may be useful here to introduce some general statistics respecting the total amount of mortgage loans granted by all the Swiss credit institutions, the figures referring to the balance sheets of all the institutions above mentioned, compared with figures showing the position of mortgage credit in all the twenty mortgage banks ; in this way the proportion will be shown between the total amount of the mortgage loans in Switzerland and the position of the mortgages effected in the mortgage banks to which the present article is devoted (1)

(1) The figures referring to Swiss credit institutions in general are taken from a publication issued by the National Bank of Switzerland : Das schweizerische Bankwesen in den Jahren 1906-1913 (*The Swiss Banking System in the years* 1906 *to* 1913). Berne, Stämpli, 1915.

TABLE I. — *Value of the Mortgages of all the Swiss Credit Institutions, and of those of the Mortgage Banks.*

	1906	1908	1910	1911	1912
	Fr.	Fr.	Fr.	Fr.	Fr.
Value of mortgages of all the Swiss credit institutions	2,545,000,000 (36.4 % of total assets)	2,891,000,000 (36.4 % of total assets)	3,305,000,000 (36 % of total assets)	3,549,000,000 (36.2 % of total assets)	3,718,000,000 (35.8 % of totai assets)
Total assets of the institutions in question. . .	6,999,268,000	7,932,266,000	9,180,950,000	9,814,598,000	10,382,245,000
Value of mortgages of Swiss mortgage banks.	975,497,000	1,125,401,579	1,327,269,186	1,421,589,534	1,492,985,026

Tables II and III present a synthetical statement of the development of the mortgage banks in the last thirty years.

In 1883 there were 15 mortgage institutions; between 1896 and 1908 the number increased to 18; in 1909 there were 19, and in 1910 there were 20; since then the number has remained unchanged.

The total assets, which in 1883 amounted to 403 millions, were quadrupled in 1912, and amounted to 1,777 millions.

These institutions generally show an increasing tendency to assume the form of a pure mortgage bank. The value of the mortgages has increased in a proportion at least equal to that shown in the aggregate assets.

TABLE II. — *Swiss Mortgage Banks. Assets in the years* 1883 1896, 1903-1912.

Number of institutions	Year	Securities easily realisable	Other assets	Total assets
		Fr.	Fr.	Fr.
15	1883	29,498,922.03	373,748,418.46	403,247,340.49
17	1896	44,907,470.49	627,346,692.10	672,254,162.59
18	1903	48,875,321.45	895,118,134.88	943,993,456.33
18	1904	49,055,510.46	946,416,947.61	995,472,458.07
18	1905	54,181,533.69	1,029,245,239.29	1,083,426,772.98
18	1906	52,425,775.04	1,111,711,538.86	1,164,137,313.90
18	1907	59,694,229.70	1,173,487,295.31	1,233,181,535.01
18	1908	62,261,194.87	1,256,616,977.39	1,318,872,172.26
19	1909	71,508,614.14	1,380,830,652.15	1,452,339,266.29
20	1910	75,777,554.75	1,504,251,405.92	1,579,978,960.67
20	1911	86,651,780.57	1,630,054,230.70	1,716,706,011.27
20	1912	94,464,827.36	1,683,195,957.92	1,777,660,785.28

In " other assets " are comprised the mortgages, the value of which we have seen above for this term of years. The same column also comprises the money on current account, movable and immovable property, and the uncalled share capital. The " securities easily realisable " comprise cash in hand, debts due from agents, bills of exchange and loans on securities. We now pass to the liabilities.

TABLE III. — *Swiss Mortgage Banks. Liabilities in the years* 1883, 1886, 1903-1912.

Number of institutions	Year	External capital Fr.	Other liabilities Fr.	Total — (External capital and other liabilities) Fr.	Banks' Owned Capital Fr.
15	1883	318,760,407.15	12,339,681.04	351,100,088.19	72,147,252.30
17	1896	541,882,880.74	23,712,628.80	565,595,509.54	106,658,653.05
18	1903	784,787,907.73	27,113,399.29	811,901,307.02	132,092,149.31
18	1904	821,648,691.46	34,473,564.83	856,122,256.29	139,350,201.78
18	1905	904,776,340.69	33,707,762.99	938,483,503.68	144,943,269.30
18	1906	960,992,688.65	42,519,811.80	1,003,512,500.45	160,624,813,45
18	1907	1,030,747,024.64	34,590,995.23	1,065,338,019.87	167,843,515.14
18	1908	1,106,588,680.66	44,590,662.28	1,151,179,342.94	167,698,829.32
19	1909	1,214,474,072.42	56,553,323.60	1,271,027,396.02	181,311,870.27
20	1910	1,313,037,996.14	60,061,446.79	1,373,099,442.93	206,879,517.74
20	1911	1,424,848,567.26	63,771,821.03	1,488,620,388.29	228,085,622.98
20	1912	1.494,969,458.92	51,165,579.42	1,546,135,038.34	231,525,746.94

By adding the total amount of the " External capital and other liabilities " to that of " Owned capital " we obtain the total balance as shown in the last column of the preceding table (Assets). The chief items of the column " External capital " are bonds, bank notes, land bills, creditors on current account, savings deposits and savings bank books.

The column " Owned capital " consists of the nominal capital and of the reserve funds.

Table IV gives the most important figures relating to the profits of these banks.

TABLE IV. — *Profits as shown by the Profit and Loss Accounts of the Swiss Mortgage Banks.*

Year	Number of institutions	Paid up Capital Fr.	Invested Capital Fr.	Gross profits Fr.	Net profits Fr.
1883	15	63,878,531.43	68,888,990.24	4,412,814.24	3,394,347.67
1896	17	93,750,000.00	101,369,555.60	7,884,022.97	6,305,812.18
1903	18	114,000,000.00	128,809,425.91	9,835,978.61	7,529,978.67
1904	18	119,500,000.00	132,006,278.12	10,499,608.34	8,118,017.22
1905	18	124,000,000.00	143,349,337.97	11,285,567.84	8,823,519.30
1906	18	135,000,000.00	147,822,911.33	12,095,054.08	9,348,818.85
1907	18	141,000,000.00	159,666,831.85	12,904,928.18	9,770,602.57
1908	18	142.472.200,00	165,744,567.55	14,088,288.28	10,569,307.12
1909	19	150,350,000.00	169,547,396.64	15,409,386.38	11,458,587.29
1910	20	171,250,000.00	189,765,778.87	16,920,732.81	12,285,792.67
1911	20	187,250,000.00	201,570,916.45	17,927,123.76	13,134,657.25
1912	20	188,250,000.00	223,779,908.63	20,106,961.20	14,260,158.63
			1,832,321,905.16	153,370,467.53	114,999,599.52

Before concluding this article it may be well to give figures respecting the average returns from the interest on mortgage investments.

These were in 1883	— 4.728 %	in 1907	— 4.307 %
» 1896	— 4.012 %	» 1908	— 4.427 %
» 1903	— 4.205 %	» 1909	— 4.430 %
» 1904	— 4.199 %	» 1910	— 4.429 %
» 1905	— 4.188 %	» 1911	— 4.449 %
» 1906	— 4.196 %	» 1912	— 4.558 %

That the mortgage banks have contributed largely to the improvement of the economic condition of rural Switzerland is clear from the figures given in this article. It must, however, be remembered, as we have already observed, that other institutions — savings banks, cantonal and local banks — have worked and are still working for the same object. For the savings banks the reader is referred to the article in the issue of the *Bulletin of Economic and Social Intelligence* for November, 1913. (1).

In a future number we hope soon to be able to give an account of the mortgage credit granted by the local and cantonal banks of Switzerland.

(1) "Savings in Switzerland and the Movement for the Institution of Postal Savings-Banks." *Bulletin of Economic and Social Intelligence*, Year IV, No. 11, November 1913.

MISCELLANEOUS INFORMATION RELATING TO CREDIT IN VARIOUS COUNTRIES

ARGENTINE REPUBLIC.

THE "BANQUE HYPOTHÉCAIRE FRANCO-ARGENTINE" IN 1914-15

The General Meeting, held on December 18th., 1915, approved the accounts of the business year 1914-15, ending June 30th., 1915.

The slowing down, already noted in the previous year, of the increase in the mortgage loans, was accentuated in the year 1914-15 : current events could not fail to have deplorable effects upon business in general.

As for the Argentine Republic, the War surprised it at the moment when the country was economically weakest. The years 1913 and 1914, more particularly the latter, were in fact years of acute crisis, due to storms, of which the like had never been seen before, which considerably reduced the crops and left a great part of the fields for a long time under water.

A slight improvement of the situation appeared, however, to be taking place when the European War broke out : the crisis developed, failures became more frequent and it was with great difficulty that the payment of interest could be obtained.

The Argentine Government immediately took the necessary steps to prevent a drain upon the gold reserves covering the paper money ; they issued, on the beginning of August 1914, a decree closing the Conversion Bank and, at the same time, gave to debtors whose engagements were payable in gold the option of paying in paper-money of the same nominal value or of postponing payment until the Bank was re-opened.

As all the loan contracts of the Banque hypothécaire required payment in gold, the Government decree did away with the stipulations which they contained. In practice, the Bank accepted payments in paper money of the same nominal value, subject, however, to the exchange being guaranteed by the debtors. This situation was, however, only transitory, as the exchange on Paris having risen considerably the Bank was able to remit on favourable terms the sums necessary to cover its charges in Europe.

The acute period of the crisis appears now to be passed and the situation is becoming easier. The improvement is due to the cessation of the storms, and to better crops, but more particularly to the influx of money into the Argentine in payment for the heavy exports, at high prices, of grain, cattle, meat, wool, hides, etc.

As the requirements of Europe, after the re-establishment of peace, cannot fail to increase, there is every reason to hope that the Argentine Republic will profit to a large extent by the revival of industrial and commercial activity which will then certainly take place, and that the effects of the crisis will completely disappear.

Bonds. — The bonds, after deducting those which had been redeemed, amounted on June 30th., 1915, to :

189,175 at 4 %
244,217 at 4 ½ %
49,762 at 5 %

Total 483,154 bonds, representing a nominal capital of 241,577,000 francs.

Mortgage Loans. — On June 30th., 1915, the mortgage loans amounted to a total of . . . . . 242,713,122 francs

During the business year 1914-15, the Bank had to examine:

69 applications for loans to a total nominal amount of	29,665,000 fr.	
18 of these applications, representing were refused, so that the Bank only granted 51 new loans, to the total amount of	3,724,200 „	
	25,940,800 „	
The payments actually made in respect of these loans having only amounted to	23,665,800 „	
there remained to be paid on June 30th., 1915, on the loans granted prior to this date	2,275,000 „	
On the other hand, during the business year, the Bank, in consequence of anticipated repayments or foreclosures, recovered	18,627,300 „	
The amount of the mortgage loans outstanding, therefore, increased by only . . . . . 23,665,800 —	18,627,300 fr.	= 5,038,500 francs

bringing the total amount on June 30th., 1915, up to 247,751,622 francs

This amount is divided as follows :

Urban loans	18,298,450 francs
Rural loans	229,453,172 »
Total	247,751,622 francs

The rural loans thus represent 92.62 % of the total amount of the loans outstanding.

Payment of annual instalments. — The total amount of the annual instalments which had become due on June 30th. 1914, and had not been paid at that date was . . . . . 5,451,307 fr. 30

The half-yearly instalments becoming due during the past business year amounted to . . . . . 20,604,340 fr. 40

The total amount of the instalments which should have been paid to the Bank from July 1st., 1914, to June 30th., 1915, was therefore. . . . . 26,055,647 fr. 70

Of this total, the amount recovered was . . . . . 15,677,768 fr. 55

So that, on June 30th., 1915 the annual instalments due and not yet paid to the Bank amounted to . 10,377,879 fr. 20

This sum, which is larger by 8,720,000 fr. than the sum due at the time of the previous general meeting, has not, however, shown a very large increase, if we take into consideration the gravity of the crisis and the large amounts of the mortgage loans, but to obtain this result, the Bank has been obliged, while allowing certain debtors, in view of the circumstances, considerable extensions of time in which to pay, to sue those amongst them whose want of good faith might have injured its interests. In the course of the legal proceedings instituted, the Bank was led to insist upon the judicial sale of certain properties. At the beginning, when the crisis was at its height, the Bank had even to acquire, for want of purchasers, some of these properties; it still happens sometimes that the property is adjudged to itself, but it is to be noted that the auction usually results in a sale, as the economic position is improving.

Up to date, the Bank has acquired properties to the value of about 6,900,000 francs: the sum of 1,120,480 fr. 20 figuring under this head in the balance sheet relates to those properties which were transferred to the Bank up to June 30th. last. They all appear at a price less then their estimated value, the amount of the Bank's purchases not exceeding, on the whole, the sums which were due to it for capital, interest and legal expenses.

The profits of the business year, after deducting all charges and depreciation, amounted to 8,413,921 fr. 61. As to the reserve funds, they amounted in all to 13,475,295 fr. 91, divided as follows:

Legal reserve	1,000,416 fr. 28
Reserve fund	8,464,947 fr. 95
Provision against possible losses	1,000,000 fr. 00
Carried forward.	3,099,931 fr. 68
Total . . .	13,475,295 fr. 91

This sum represents about 68.23 % of the paid up capital.
The balance sheet on June 30th., 1915, was as follows:

Assets.	francs	*Liabilities.*	francs
Shareholders (uncalled capital)	56,250,000.00	Capital	75,000,000.00
Securities	201,862.32	Statutory reserve	879,720.20
Mortgage loans	247,751,622.00	Reserve fund	8,464,947.95
Bankers and National Defence Bonds	11,788,116.93	Bonds	241,577,000.00
Properties acquired as the result of foreclosures	1,120,487.20	Sundry creditors	285,558.75
Sundry debtors	177,140.65	Half-yearly instalments received in advance	5,375,156.40
Mortgage debtors for interest accrued	10,377,879.20	Sundry items	2,034,608.60
Taxes recoverable	185,441.83	Balance profit: Brought forward. 3,102,278.70	
Appreciation of bonds to be redeemed	16,247,096.94	Of the year 1914-15. 8,413,921.61	11,516,200.31
Sundry items	1,028.980.69		
Sundry expenses paid in advance	4,564.45		
	345,133,192.21		345,133,192.21

In conclusion we shall give the profit and loss account to June 30th., 1915:

Dr.	francs	*Cr.*	francs
General expenses	641,035.06	Interest on loans	20,519,486.00
Taxes	409,857.76	Fines for delay and indemnities for anticipated repayments	351,370.65
Bank commissions and charges	29,550.36	Sundry interest	324,684.47
Valuation fees	35,939.65		
Commissions	78,874.00		
Interest on bonds	10,297,629.33		
Redemption of bonds	1,288,733.35		
Balance	8,413,921.61		
	21,195,541.12		21,195,541.12

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* *

THE "BANCO EL HOGAR ARGENTINO" IN 1914-1915.

The same causes which paralysed the operations of the various mortgage institutions in the Argentine Republic in 1914 and the first few months of 1915, exerted their influence on the results of the *Banco El Hogar Argentino* during the business year 1914-1915.

On August 31st., 1915, there were 7,912 loans out-standing to the value of 98,445,457 dollars, a decrease of 64 in the number of the loans, but an increase of 1,516,115 dollars in amount. Three fourths of these loans were guaranteed by urban properties and one-fourth by rural properties.

On the same date, there were 1,371 promises to sell for a total amount of 15,316,900 dollars as against 1,447 promises for a total amount of 15,962,794 dollars on the corresponding date of the previous year.

During the business year, the share-capital of the Bank remained fixed at 57 ½ million dollars, divided into 230,000 shares of 250 dollars each, of which 45,000 were fully paid up and 185,000 were paid up to the extent of 80 %.

The following statement shows the comparative working of the Bank in the two business years 1913-14 and 1914-15.

Dr.	1913-14	1914-15
	Dollars	Dollars
General expenses	907,055	750,496
Commissions of correspondents, agents, etc.	86,254	5,893
Redemption, etc., of bonds	2,874,367	2,625,802
Taxes on the capital	150,942	—
Dividend on the "certificats de participation"	1,339,845	1,250,593
Depreciation of furniture and fittings	21,741	12,887
	5,383,204	4,654,671
Cr.		
Interest, premiums and fines	11,614,028	9,472,950
Transfer fees and dividends withheld	36,792	24,622
Rents	88,369	107,886
Profits on properties sold	405,523	25,828
	12,144,712	9,631,286
	5,383,204	4,654,671
Net profit	6,761,508	4,976,615
Balance brought forward	464,327	575,522
Total available for allocation	7,225,835	5,552,137
This was allocated as follows:		
Dividend on the shares	5,652,766	4,095,912
Reserve fund	266,012	192,749
Special reserve	399,019	289,123
Directors and supervisors	266,012	192,749
Insurance fund for the employés	66,503	48,187
	6,650,313	4,818,719
Carried forward	575,522	733,418
	7,225,835	5,552,137

The dividend on the shares for the year 1914-15 was thus fixed at 8 % as compared with 11 % in the previous year.

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THE VALUE OF PROPERTY AND THE AMOUNT OF MORTGAGE INDEBTEDNESS. — Supplement to *L'Information*, Paris, January 22nd., 1916.

The mortgage crisis which has occurred in the Argentine and is not yet entirely overcome has impelled the public authorities to inquire into it and to ascertain its causes and extent. This work was entrusted to a Mortgage Investigation Committee. The Chairman has just presented his Report in which he examines the value of landed property in the Republic, the mortgages in force with which it is at present burdened and the foreclosures which have been made in respect to them. The following is the analysis of the Report given by the Paris newspaper *L'Information* in its issue of January 22nd, 1916:

The value of the property being ascertained to be 18,000,000,000 piastres, the amount of the mortgages still in force, according to the information obtained from the Property Register in the capital (which relate to the capital itself and to the national territories) and the information relating to the provinces, amount to a total of 2,989,349,216 piastres. In this sum, the federal capital figures for 910,665,156 piastres and the Province of Buenos Ayres for 917,960,314, or, for the two together, a total of 1,828,625,740 piastres, which represents 61 % of the mortgages of the whole country, a proportion which is by no means extraordinary, in view of the higher value of the land in these two parts of the Republic.

The respective sums for the rest of the country are as follows:

Santa Fé	269,784,337	piastres
Entre Rios	86,443,723	"
Corrientes	41,837,652	"
Cordoba (estimated)	200,000,000	"
Tucuman	57,401,828	"
Santiago del Estero	36,040,773	"
Salta	19,000,000	"
Jujuy	15,799,697	"
Catamarca	3,786,012	"
La Rioja	955,686	"
Mendoza	194,623,510	"
San Juan	24,069,339	"
San Luis	63,468,977	"
National Territories	167,512,212	"

The Investigation Committee considers that the figure 2,800,000,000 piastres would be more nearly correct, for it must be borne in mind that the sum of 2,988,349,216 piastres, although the official figure, requires to be reduced by taking account of two circumstances, namely:

(1) That it is subject to error, because, though it is not to be supposed that mortgages exist which are not inscribed in the Registers, the cases of mortgages paid off without the fact being inscribed in the Register have become common in several provinces ;

(2) That, in the official figures, no deductions are made for the instalments repaid on the loans granted by the National Mortgage Bank and other institutions which give loans on mortgage repayable by periodical instalments. The National Mortgage Bank and the *Banco El Hogar Argentino* alone have, under this head, been repaid 56,000,000 piastres which still figure as mortgages in force in the Property Registers without having been deducted.

The total mortgages of 2,800,000,000 piastres, in relation to the value of property, which is 18,000,000,000 piastres, represents a burden of 15.55 %.

This burden, which is less than the sixth part of the value of the property should not, in the opinion of the Committee, cause any alarm nor suggest abnormal measures beyond the ordinary law, such as a moratorium for payments due on mortgages, special issues of securities or remissions of debt, which might alter the monetary system and prejudicially affect the regular working of the ordinary laws which regulate the civil and commercial relations of the country, internal and foreign ; such measures would be injurious to the credit of the nation and to the banking institutions.

The Report proceeds to analyse the amount of the mortgages liable to foreclosure and says that the situation is due to temporary causes which will run their natural course when the vital forces of the country enter into play, with the exchange of its natural and industrial products, which will soon furnish the necessary resources to settle the outstanding debts.

Of the mortgages in course of foreclosure, 3,288 cases were studied, representing a total of 136,332,962 piastres and, applying a proportionate estimate to the remaining figures, it is calculated that in the whole Republic the total amount of the mortgages liable to be foreclosed is 220,000,000 piastres.

In this sum, the capital and the Province of Buenos Ayres figure for 54,000,000 piastres and 99,500,000 piastres respectively, or 70 % of the mortgages foreclosed.

These figures enable the following percentages to be calculated :

Mortgages in force, 2,800,000,000 piastres : in proportion to the value of the property (18,000,000,000 piastres) the percentage of mortgages is 15.55 %.

Mortgages in course of foreclosure, 220,000,000 piastres : in proportion to the total mortgages in force (2,800,000,000 piastres) the foreclosures amount to 1.22 %.

Of the mortgages in force, 583,000,000 piastres are held by the National Mortgage Bank ; 866,000,000 piastres by mortgage companies and societies ; 198,000,000 piastres by loan and discount banks ; 32,000,000 piastres by insurance companies ; 20,000,000 piastres by local companies and banks, and lastly, 1,285,000,000 piastres by private lenders.

In order to restore and improve the position of mortgage debtors and even of persons owing money on note of hand who possess property capable of being realised to meet their due obligations or to renew their mortgages, there exists no system of easier or more convenient application (says the Report) than that of authorising the National Mortgage Bank to renew the issue of cedulas.

The Committee declares that no security, no new issue, whether based on a property guarantee or secured by the taxes, can replace on the Argentine market or in the foreign markets the Argentine mortgage cedula, which has become embodied in the national organisation and naturalised abroad, where its credit stands firm, notwithstanding the War which is raging in Europe, where to-day about 300,000,000 piastres in cedulas are held by persons who do not wish to dispose of them, who keep them tenaciously, for their income is well secured and they receive the interest regularly from the Mortgage Bank.

The mortgage cedula, which has survived all the political and economic crises of the country, which has seen colossal banking undertakings disappear, such as the Bank of the Province of Buenos Ayres, the National Bank and the Mortgage Bank of the Province, and which has been in existence for 30 years without appreciable fluctuations in its quoted price, is the only land security which can retain at this moment the faculty of serving as intermediary between creditors and debtors to satisfy their mutual engagements.

The Committee is of opinion that no other measure would inspire confidence; it would take months and even years to gain a foothold on the market and, moreover, could only acquire a position like that of the cedula after a long discussion in the ordinary session of Congress in 1916 which would aggravate still more the position of the debtors.

From the moment of its entry on the market, the mortgage cedula would set free the deposits of the national and foreign banks, and would furnish these banks with property guarantees for their commercial loans, would instil a new activity into the capital which to-day is paralysed for want of safe and remunerative investment.

EGYPT.

THE LAND BANK OF EGYPT IN 1914-15. — Reports of the Board of Management and of the Supervisors (Ordinary general meetings of December 21st., 1915, and January 18th., 1916). Alexandria, 1915.

Egypt having felt the effect of the serious events which took place during the past business year, mortgage business came almost to a standstill, and the Land Bank had to content itself with making certain loans for which formal agreements had been entered into before the outbreak of hostilities.

Regularising and consolidating transactions, within the limits prescribed by the rules, completed the work of resuming and putting in order certain business.

The total amount of mortgage loans, ordinary or on current account, was 95,567,806 fr. 31.

The low prices obtained for cotton, the principal export, during the first part of the cotton season following upon the almost complete suppression of the credits and facilities granted to the grower to enable him to gather in the crop, grievously affected the payment of the annual instalments. The measures taken by the British and Egyptian governments, added to a more favourable end of the season, appreciably improved the situation from this point of view. Nevertheless the annual payments in arrears, which on September 30th., 1914, amounted to 5,374,484 fr. 07, now amount to 10,486,893 fr. 27, of which 3,703,890 fr. 94 form the arrears properly so-called, and 6,783,002 fr. 33 relate to the current year.

Mortgage investments. — The Land Bank, from its establishment to the end of the last business year, granted 2,527 loans repayable by instalments for a total amount of 181,769,835 fr. 73. Of these 39 were granted in the last business year to the total amount of 6,836,227 fr. 95.

The repayments in advance amounted to 52,327,660 fr. 84. of which 6,878,452 fr. 60 were made during the year.

The part of the annual payments representing repayment of capital, whereby the loans are paid off, amounted to 38,287,053 fr. 20. Of this sum, 3,888,996 fr. 89 was repaid during the year.

The balance still outstanding of the loans repayable by instalments thus, on September 30th., 1915, amounted to 91,155,121 fr. 69.

The number of mortgage current accounts opened since the foundation of the Land Bank was 39, for a total amount of 14,196 297 fr. 29.

During the year, one loan was granted, amounting to 388,852 fr. 88.

The loans paid off, the repayments in advance, and the credits not utilised amounted to 9,783,612 fr. 47.

The balance is 4,412,684 fr. 82.

The total amount of the mortgage loans in force on September 30th., 1915, amounts to 95,567,806 fr. 51.

There was due on the amounts of the adjudication prices of the property foreclosed upon 2,328,247 fr. 21.

The total mortgage transactions of the Bank thus amount to 97,896,053 fr. 72.

Annual payments to be recovered. — On September 30th., 1914 the annual payments to be recovered amounted to 5,374,484 fr. 07.

The annual payments during the year being 10,617,911 fr. there were to be recovered 15,992,305 fr. 07.

The receipts under this head during the year actually amounted to 5,505,501 fr. 80.

The amount remaining due on September 30th., 1915, was 10,486,893 fr. 27.

The interest due in respect of delay in the annual payments amounted to 1,111,946 fr. 33.

The total amount of investments guaranteed by mortgage or seller's privilege is thus 109,494,893 fr. 32.

Short term loans. — The short term loans granted to borrowers on mortgage who apply for them for cultivation purposes and within the limits of the return from the land which they cultivate, amounted during the year to 677,638 fr. 91.

We may add that on September 30th., 1915, the 1,789 outstanding loans were thus divided : Rural loans, 1,736 ; urban loans, 58 ; mixed loans 4. The average duration of the loans was 24 years 7 months.

RUSSIA.

THE WORK OF THE RUSSIAN MORTGAGE CREDIT INSTITUTIONS IN 1914. — Вѣстникъ Финансовъ, Промышленности и Торговли. (*Messenger of Finance and Commerce*) N° 41, 11-24 October, 1915.

According to the figures presented in the first number of *La Statistique du Crédit à long terme en Russie* the transactions of the Russian mortgage banks (in millions of roubles) were as follows :

Name of Bank	Land Securities and Mortgage Bonds January 1		Increase + or Decrease —
	1914	1915	
I. *State Banks.*			
(*a*) The Nobles' Land Mortgage Bank . . .	852.1	910.8	+ 58.7
(*b*) The Peasants' Agricultural Credit Bank .	1,293.4	1,332.9	+ 39.5
(*c*) The Credit Bank of the Associations and of the Zemstvos	11.4	29.8	+ 18.4
Total . . .	2,156.9	2,273.5	+ 116.6
II. *Private Joint Stock Banks and Mutual Credit Societies.*			
(*a*) Land Credit Banks	1,294.2	1,340.8	+ 46.6
(*b*) The Kherson Zemstvo Bank	202.0	204.3	+ 2.3
(*c*) The Credit Society of the Polish Zemstvos	179.9	180.2	+ 0.3
Town Credit Societies.			
Of Central Russia.	912.0	949.5	+ 37.5
Of the Baltic Provinces	109.7	116.6	+ 6.9
Of the District of the Vistula	215.9	227.9	+ 12.0
Provincial Credit Societies.			
Of the Province of Petrograd	31.7	35.5	+ 3.8
Of the Province of Moscow	0.8	1.0	+ 0.2
Regional Credit Societies.			
Of the Zemstvos of Eastland, Lepland and Curland	87.9	89.3	+ 1.4
Land Credit Banks and Town Banks of the Caucasus.	105.5	110.5	+ 5.0
Total . . .	3,139.6	3,255.6	+ 116.0
Grand Total . . .	5,296.5	5,529.1	+ 232.6

As the above figures show, the issue of mortgage bonds and land securities increased very much during the second half of 1914, in spite of the abnormal conditions.

The amount of private mortgage debt and of debt on estates belonging to towns was as follows in the years from 1910 to 1914.

Year	Private property		Estates belonging to Towns		Total	Increase + Decrease —
		+		+		
1910	2.773		1.265		4.038	
1911	3.052	+ 279	1.394	+ 129	4.446	+ 408
1912	3.300	+ 248	1.497	+ 103	4.797	+ 351
1913	3.479	+ 179	1.643	+ 146	5.122	+ 325
1914	3.697	+ 218	1.757	+ 114	5.454	+ 332

On the whole it may be said that in the last year of the period the increase had been equal to previous years, being slightly greater for private property and slightly less for town estates.

With regard to the profits of mortgage credit institutes, the following figures (millions of roubles) which relate to the joint stock mortgage banks, have a certain interest.

Year	Capital of the banks		Dividends	Interest paid on Capital
	In circulation	Value on the Exchange of the Share Capital		
1911	81.6	217.4	12.8	6
1912	86.7	233.3	13.7	6
1913	89.5	237.6	14.2	6
1914	91.3	227.4	14.3	6 1/3

The share capital in the last year has substantially increased (an increase of 1.8 million roubles) while the value on the Exchange has declined considerably — the decrease being 10.2 million roubles, and being due undoubtedly to the unfavourable conditions of the market. On the other hand the interest paid on capital has risen from 6 per cent to 6 ⅓ per cent which was the rate paid in the last working year.

Part IV: Agricultural Economy in General

GREAT BRITAIN AND IRELAND.

PROPOSALS FOR INCREASING THE HOME PRODUCTION OF FOOD (*Continued*).

§ 4. The Report of the Scottish Committee.

The Report presented by the Departmental Committee appointed to inquire into the Home Production of Food in Scotland was remarkable for the fact that its recommendations were chiefly of a technical character, addressed to the farmers themselves rather than to the Government.

The Committee rejected the proposal that the Government should guarantee that wheat (or other cereals) should not for an assigned period fall below a fixed minimum price. The proposal did not appear to them to be practicable. Witnesses who had advocated it had estimated very variously the minimum price and no clear indication had been given as to how a proper discrimination could be exercised between various qualities of grain. This latter aspect of the question, while important in the case of wheat, was even more so in the case of oats, which chiefly concerned Scottish growers of cereals, since the differences of value between samples of oats bear a much higher proportion to the average value of the grain. The very considerable increase in the acreage under wheat in 1915 as compared with 1914 indicated the inducement to grow it which enhanced prices had created. The Committee pointed out the risk that any guarantee of a high price might lead to the cultivation of wheat on land which would make a better contribution to the national needs if it were used in some other way for the production of food. They also directed attention to the fact that the contribution which Scotland could advantageously make to the wheat supply of the country was comparatively slight and was of much less importance than was the degree in which it could furnish meat and dairy produce. Further, the fixing of a minimum price for the protection of the producer

against loss might entail a maximum price to restrict his profits and this had disadvantages for a country in a large measure dependent on world markets.

The Committee also rejected the proposal that farmers should be compelled by law to break up for grain a fixed or increased proportion of their holdings. The real object in view, they urged, was not the cultivation of more land, but the production of more food, and in relation to this object compulsion was exceedingly difficult to apply.

Even to increase the area of cultivation, it would not be easy to use compulsory methods. A hard-and-fast rule, such as that every farmer must break from lea twice as much land as he had hitherto broken, would penalise those who had cultivated their land most fully, and press least upon those who had cultivated least and who probably had most land proper to be broken up. On the other hand compulsion at the discretion of experts and based on the consideration of circumstances in detail would require the services of a very large number of commissioners or committees and a corresponding body of officials. The intermediate course — a general rule of compulsion to make a fixed increase, with a right of appeal to a tribunal by farmers who thought themselves aggrieved by the compulsion — would have involved an amount of investigation and consideration of individual cases which could not be undertaken in the time available.

Apart, however, from these considerations the area of land to be brought under cultivation was not the only factor in increased production. If compulsion were not accompanied by some guarantee against loss, its tendency would be to destroy the farmer's confidence in the profits of his increased cultivation. He might thus be led, while increasing his area of tillage, to make no corresponding increase of expenditure upon his crops, and this tendency, which it would not be easy to counteract, would go far to neutralise the effect of a compulsory extension of tillage. A guarantee againt loss could only take the form of a fixed minimum price, which was exposed to the objections already indicated, or consist in a general indemnity against loss. Such a general indemnity would entail consideration of the cost and return, not of a single year's crop, but of the whole course of a rotation, since the effect of additional cultivation was not exhausted in a single year.

The Committee pointed out that the advantages of free effort and of compulsion could not be combined. The present and prospective grain prices afforded to farmers an exceptional opportunity of breaking up grass lands which were in need of renewal by a course of cropping, and the Committee believed that the prospects of a good return for efforts and expenditure were sufficient to induce farmers to increase their production.

It was thought, however, that vigorous steps should be taken to convince farmers of the desirability of increased production and to bring to their notice the various improvements of farm practice which were likely to be useful. The Committee, accordingly, recommended that a committee should be set up in the area of each District Committee of each County Council, to be called the District Agricultural Committee

and to have the special duty of stimulating production by all possible means, and that each such committee should be composed of :

(*a*) Representatives of the Secondary Education Committee of the County Council.

(*b*) Representatives of the District Committee of the County Council.

(*c*) Representatives of Agricultural Societies operating within the area, the number in each District and the Societies to be represented being fixed by the Board of Agriculture for Scotland.

(*d*) Representatives of trade organisations of farm workers operating in the area, the number in each district and the organisations (if any) to be represented being fixed by the Board of Agriculture for Scotland.

(*e*) Representatives nominated by the Governors of the Agricultural College situated in that district of Scotland which includes the county in which the proposed committee is to work ; such representatives to include members of the staff.

(*f*) A representative nominated by the Board of Agriculture for Scotland, who shall act as convener and secretary until the committee meet and select their own convener.

The recommendations made by the Committee for the increase of production and the avoidance of waste are thus summarised in the Report itself :

(1) That basic slag should be more generally used for the improvement of grass land.

(2) That artificial manures should be more generally used in growing crops, especially grain crops.

(3) That the export of artificial manures should be allowed only under licence.

(4) That the Board of Agriculture for Scotland should publish in their monthly report, during the season of the year when manures are being purchased, the unit values of the various ingredients at the principal ports of supply to Scotland.

(5) That where practicable there should be an extension of land under wheat and oats.

(6) That the advisability of change of seed and of the use of new varieties of oats and other seeds should in all cases be carefully considered at this time.

(7) That a representation should be made to the railway companies that, following the precedent they have made by carrying breeding horses at reduced rates, they should charge a modified rate for the carriage of potatoes certified to be used for seed.

(8) That wherever possible a greater number of calves should be reared.

(9) That the keeping of pigs should be encouraged.

(10) That in order to encourage the keeping of pigs there should be, so far as is consistent with a due regard for public health, a relaxation of the bye-laws relating to pig-sties, especially in rural districts.

(11) That the keeping of poultry and the increase of egg production should be encouraged.

(12) That the prohibition of the export of all feeding stuffs should be continued.

(13) That the Board of Agriculture for Scotland should state in their monthly report the prices of feeding stuffs and moss litter at all the principal ports of supply to Scotland, with notes on the relative value of the various cakes and other feeding stuffs.

(14) That the Board of Agriculture for Scotland should promote and assist demonstrations of the use of motor power in ploughing and other agricultural operations.

15) That it should be represented to the Military Authorities and recruiting agencies that any attempt to increase or even maintain the food production of the country would be made impossible by a further withdrawal from agricultural labour of experienced workers.

(16) That so far as educational interests allow, School Boards should consider agricultural needs in fixing the time of school holidays, and should also have regard to special agricultural emergencies in dealing with applications for exemptions from school attendance.

(17) That allotments should be provided in the neighbourhood of towns and villages.

(18) That co-operative organisation for the purchase of farming requirements and the sale of produce should be encouraged.

(19) That all liquid manures should be carefully conserved for application to the land.

(20) That straw should be saved for fodder as much as possible and not used unnecessarily for litter.

(21) That the Prevention of the Slaughter of Animals Order (1915) should on its expiry be renewed so far as it deals with in-calf cows and calves suitable for rearing as beef-producing animals.

(22) That all landowners and shooting tenants should be urged in the interests of the national food supply either to kill as many rabbits as possible, or to net woodlands and plantations, or as an emergency measure to allow agricultural tenants the unrestricted privilege of killing rabbits, including (*a*) the right of entry into woods, (*b*) the employment of such increased number of men as may be necessary for the work, and (*c*) permission to kill rabbits on moors without reference to any time limit.

(23) That assistance, by defraying a portion of the cost, should be given by the Board of Agriculture for Scotland to duly constituted bodies, who submit to the Board satisfactory schemes for dealing with plagues of rats, sparrows, rooks or pigeons.

(24) That an appeal should be made to all owners of deer forests and grouse moors to allow these to be used — so far as practicable — for grazing cattle or sheep on terms to be mutually arranged.

(25) That all artificial rearing of game should be discouraged.

(26) That the fullest possible use for grazing purposes should be made of golf-courses and policies.

To the Report of the Scottish Committee was appended a Statement by Mr. H. Hope, M. P., who, while agreeing with most of the recommendations made by the majority, urged that it was necessary to apply compulsion in order to increase the area under cultivation. He proposed that District Agricultural Committees should be formed, each to be composed of three skilled and practical agriculturists, and that they should supervise the area of land in their respective districts to be continued under permanent or temporary pastures. A Committee should in no case interfere with the grass lands required for the regular stocks of breeding or dairy animals on a farm, but where no such stock was kept, where the land was suitable and where, in their judgment, a crop could be profitably and practically grown, they should be empowered to order to be ploughed up and cultivated that area of the grass land sown prior to 1915 which they considered the occupier could reasonably undertake. An order so given by the District Agricultural Committee should be binding on the occupier under penalty of a fine.

Three other members of the Committee made a separate Statement, in which they recommended that in the case of all land under rye-grass and other rotation grasses and clover, except such as had been sown with grass and clover in the springs of 1914 and 1915, farmers should be required to plough up and put under a crop, other than grass or clover, twice as much as they similarly dealt with in 1914-15, provided that such larger area is in existence on their respective holdings. Farmers desiring exemption from this obligation might be given a right of appeal to a local Committee, acting in conjunction with the Board of Agriculture for Scotland, whose decision should be conclusive.

§ 5. The majority report of the Irish committee.

As in the case of the Scottish Committee, the Report of the Irish Committee was a complete report and contained recommendations of a technical as well as of an economic character.

The main objects to be aimed at in affecting an increased supply of food in Ireland are thus stated by the Committee :

(*a*) A material increase of the area under tillage, not only with a view to the direct production of more human food, but also to the indirect production thereof by increasing the amount of fodder available for cattle.

(*b*) The maintenance, increase and improvement of breeding stock of all kinds.

(*c*) The improvement of the farmers' position in regard to the means of obtaining the use of machinery and implements.

(*d*) The conservation of the artificial manure supply of the country.

(*e*) The maintenance of the Irish fishing industry.

The Report notes that at a special meeting of the Council of Agriculture (1) held in August, 1914, the question of a possible shortage in the food supplies of the country was discussed and that an appeal was made, through the Press and otherwise, for an increased tillage output. No doubt (says the Report) the prospect of higher prices had its influence, but these appeals and others on similar lines were warmly responded to throughout the country.

In view of the fact that for a long series of years the area under tillage in Ireland had been steadily diminishing, the Committee was of opinion that the acreage under crops in 1915 could not be considered unsatisfactory in comparison with the acreage in 1914. There was, however, abundant room for improvement.

In regard to live-stock, the decrease in the number of horses in Ireland was due mainly to extensive purchases by the War Office, but was a matter of grave importance which would require to be closely watched. The decline in cattle and pigs was regrettable, and only in the case of sheep could the number in the country be considered normal. The Committee noted with satisfaction the passing of the Maintenance of Live Stock Act, 1915, which conferred powers upon the Department of Agriculture to prohibit the slaughter of breeding stock, to stop the movement of animals where slaughter is prohibited, and to deal with immature stock. They suggested that the Act, which is merely an emergency measure, should be made permanent.

While themselves expressing no opinion as to whether exceptional measures should be taken in order to increase the growth of certain food crops, the Committee, assuming that the Government decided that such steps were necessary, recommended that a minimum price should be guaranteed for wheat and oats. They held that the guarantee should be for one year only, but did not suggest a price, contenting themselves with laying down the principles upon which it should be fixed. They argued that it should be regarded as an insurance against loss to the farmer and not as a bonus. If the farmer were asked to break up land and run risks as to the result, the Committee did not feel that there was any departure from sound economic policy in agreeing to a minimum price to secure him against loss. The minimum price should apply only to wheat and oats, as otherwise the expedient would be dangerous, both in the interests of the agriculturist and of the consumer.

In the opinion of the Committee, it was important to encourage wheat-growing in Ireland, but care must be taken that the cultivators are not artificially encouraged to grow wheat under conditions of soil and climate more suitable for oats. If, therefore, a minimum price were guaranteed for wheat, a relative minimum price should be guaranteed for oats, which should remain the staple grain crop in Ireland. The amount of

(1) The Council of Agriculture is a body partly elected by the County Councils and partly nominated by the Department of Agriculture which meets periodically to advise the Department on questions connected with agriculture.

the minimum price should be carefully estimated with a view to its being no more than enough to give the farmer a feeling of security in growing the required crop, having regard to the normal conditions of his business.

As to the length of time during which the guaranteed minimum price should operate, the Committee held that a proposal going beyond one year would be regarded as exceeding the requirements of a war measure and as contemplating a policy upon the expediency of which opinions were sharply at variance.

A further recommendation of the Committee was that some system of loans should be devised to enable small holders to obtain the use of agricultural machinery and implements, including meal mills for grinding their home-grown wheat and oats. Evidence had been given that some co-operative societies had borrowed money from the local banks at 4 per cent. to purchase implements and had hired them out with satisfactory results. It had also been shown that the Department of Agriculture had set aside a large sum as a Loan Fund for this purpose and that their officials had spread a knowledge of the use of several implements, especially in the West of Ireland. Both these schemes, the Committee agreed, were deserving of development. They recommended that the County Committees of Agriculture should be asked to take charge of a scheme of loans in their several districts.

Evidence had been taken as to the supply of manures, feeding stuffs and agricultural seeds, but none of the witnesses had feared a shortage, except in the supply of basic slag. The Committee recommended the prohibition of the export from the United Kingdom of artificial manures and of the constituents used in their manufacture.

Fish being an important article of food in Ireland, especially among the poorer people, the Committee carefully considered the question of maintaining the supply. The only recommendation which they made on the subject, however, was that the system of loans for the provision of boats and fishing gear should be extended.

§ 6. Sir Horace Plunkett's Minority Report.

The Majority Report of the Irish Committee was not signed by Sir Horace Plunkett, who, finding himself in disagreement with the majority in many important matters, was obliged to present a separate Report.

Sir Horace was in general agreement with the attitude of the majority in regard to inducements in the form of insurance against loss should the Government press upon the farmer an extraordinary departure from his usual method of cultivation. It was in regard to the question what measures might lead to a natural, voluntary and continuing increase in the production of food that he was at variance with them. He submitted that the steady decline of tillage for decades past indicated the need for a vigorous and comprehensive scheme of agricultural reform if the food producers of the country were to meet the nation's necessity. The first thing to con-

sider was some change in the prevailing methods of husbandry. He believed that the system of "continuous cropping," which had been described to the Committee by Mr. T. Wibberley, gave every promise of an increase in the production of food. By adopting it the farmer could reduce substantially the quantity of artificial fertilisers and imported feeding stuffs he usually had to buy, and could double and even treble his production of food. The great increase of forage crops (which could be converted into meat, milk and butter) did not, it was claimed, preclude a simultaneous increase in the production of grain crops.

The system depended absolutely for its success upon the use of modern implements and machinery, with which even large farmers were singularly ill equipped, while to the great majority of small farmers they were wholly unknown. The most important statement made by Mr. Wibberley had been that these implements, by economising labour, would make it much more efficient, while it would be rendered much less toilsome by the added interest of the work. In the result, labour would be much better paid and an increase in revenue would be assured to the farmers.

The majority had been silent upon the subject of labour in their Report, because they had thought that, so far as the immediate production of food was concerned, the labour engaged would be predominantly that of small farmers and their families. It was manifest, however, that as increased effort in production would require that, on small holdings which are above the line which divides farms from plots and allotments, the labour of the farmer and his family should be supplemented. To secure adequate provision for the farmer, labour should be organised and made more mobile, and Sir Horace suggested that the machinery of the Labour Exchanges should be extended throughout the country in order to equalize, as far as possible, the supply and the demand. Power might be given to local authorities (as had been done in Italy) to move labourers from one district to another at Government expense, and unemployed persons suitable for the work in question might be organised into squads which could be moved from place to place.

While admitting unreservedly that a substantial rise in agricultural wages was essential, Sir Horace Plunkett was of opinion that a "minimum wage" would not benefit the agricultural labourer at the moment since it would limit employment by making farmers unwilling to develop their industry. The true solution was to be found in the adoption of a more profitable system of cultivation, under which both the wages of the labourer and the revenue of the farmer could be increased.

The use of labour-saving implements, however, was a necessary corollary to the adoption of intensive methods of farming. The Majority Report had noted with approval the existence of co-operative societies which purchased implements and hired them out, but this was the only indication that the Committee considered co-operation to be a factor in the problem it was discussing. The farmers throughout the country were beginning, however, to grasp the truth that an all-round application of co-operative methods to the farmer's business was essential to the

well-being of rural communities where small-holders predominate. Nor could any such revolution in the industry and business of farming as the tillage revival now urgently required be accomplished in any other way than by co-operation between the agencies which direct governmental functions in agriculture and those which render the voluntary efforts of the workers effective through organisation. To bring this about Sir Horace recommended the formation of a small joint Committee, consisting of representatives of the Department of Agriculture and Technical Instruction and of the Irish Agricultural Organisation Society, with an impartial Chairman appointed by agreement or, failing agreement, by the Government. This Committee could decide how best to co-ordinate State assistance with organised voluntary effort in food production and could move the Government to take certain necessary measures in regard to labour, to the supply of agricultural implements and manures, and the provision of the funds needed for the combined campaign of better farming and better business.

Conclusion.

The difference between the principal recommendations contained in the various Reports is somewhat striking. To resume them, the English Committee recommended a guaranteed minimum price for wheat of 45 s. per quarter for five years. The Scottish Committee rejected the proposal for a guaranteed minimum price and their recommendations related to the means whereby, without any radical change in the system of cultivation, production might be increased. The Majority Report of the Irish Committee recommended a minimum price for one year for both wheat and oats, but did not suggest what that price should be. Sir Horace Plunkett in his Minority Report, while agreeing with the proposed minimum price for wheat and oats, recommended a fundamental change in the system of cultivation combined with the further development of agricultural co-operation.

These differences are explained, in large measure, by the different agricultural conditions which prevail in the three Kingdoms, but they depend also upon different points of view and reflect controversies, political or economic, which had their origin in times long anterior to the outbreak of the European War. In order that the influence of the point of view may not be overlooked by the reader, we have given at some length the arguments upon which the Committees based their respective recommendations. It would be interesting, also, to note the criticisms, favourable or unfavourable, which have been made in the agricultural press on the various proposals, but this would carry us too far.

SWEDEN.

AGRICULTURAL LABOUR AND WAGES (*Continued*)

II. — *LABOUR CONDITIONS ON CERTAIN TYPICAL HOLDINGS.*

§ 1. THE HOLDINGS SELECTED.

In order that the conditions of agricultural labourers might be better studied, certain holdings were selected, as already stated, which might fairly be considered typical of agricultural conditions in the various parts of Sweden. A special list of questions was sent to the occupier of each of these holdings which was returned by 238 with all the information requested. The replies refer to 1911 unless otherwise stated.

The enquiry wished in the first place, to illustrate as accurately as possible, the environment in which the labourer works (area of the holding, the kind of farming practised, numner of head of live-stock, use of machinery, etc.)

The following tables give a brief summary of the replies obtained on this point :

TABLE A. — *Area and Taxable value of Holdings.*

Number of Holdings	Number of *torps* comprised thereon		Area in hectares						Taxable value (in crowns)	
			Under crops (1)		Woods		Total area		Total	Per farm
	Total	Per estate	Total	Per farm	Total	Per farm	Total	Per farm		
238	1,386	6	42,159	178	160,804	708	223,671	985	41,411,300	178,497

(1) The total area of the torps amounted to 5,570 hectares; the area under edible roots to 2,927 hectares.

TABLE B. — *Number of Head of Live-Stock.*

Number of holdings	Actual number of animals on the estates (exclusive of the *torps*)							Per 100 hectares		
	Horses	Oxen	Cows	Other cattle	Sheep	Pigs	Units of live-stock (1)	Horses	Cows	Units of live-stock (1)
236 (2)	4,882	1,075	16,891	9,189	1,590	4,173	31,086	12	40	73

(1) To render the figures comparable all the animals on the holdings have been reduced to units of live-stock. Each unit = 1 head of cattle = $^2/_3$ of a horse = 10 sheep = 4 pigs.
(2) Two holdings did not supply information.

TABLE C. — *Machinery in Use.*

Number of holdings	Number of holdings making use of —					
	Seeders		Mowers		Harvesters	
	Actual figures	Percentage	Actual figures	Percentage	Actual figures	Percentage
218 (1)	180	82.6	214	98.2	176	80.7

(1) Twenty holdings did not supply information.

Some further particulars should be added to these figures.

Of the 238 holdings, 14 were crown property, 6 belonged to communes and other administrative bodies, 54 to private companies, and 164 to private persons. Two hundred and two holdings were conducted by their owners and 36 by other persons. As to area:

33 covered an area of less than 50 hectares
32 " " " " from 50 to 99 "
84 " " " " " 100 " 199 "
70 " " " " " 200 " 399 "
19 " " " " " 400 hectares and over.

Most of these holdings therefore, come under the category of large holdings on which it is the business of the farmer to organise and direct the labour at his disposal. Each of the 238 holdings is, economically speaking, an agricultural unit on which the labour force and live-stock are placed under one management.

As most of the holdings taken into consideration are too extensive for the owner to be able to supervise all the details of the business, this duty is entrusted to a special managing staff. The following data have been obtained from 81 holdings as to the number and salaries of the persons so employed.

Number, Description and Salaries of the Managing Staff.

Number of holdings	Stewards		Inspectors, etc.		Accountants		Total	
	Number	Average annual salary	Number	Average annual salary	Number	Average annual salary	Number	Average annual salary
		crowns		crowns		crowns		crowns
81	16	3,741	63	1,621	40	1,46	119 (1)	1,748

(1) Besides these, 4 inspectors and 2 accountants were engaged for a part of the business year.

We thus see that the managing staff numbered in all 125 persons who received during the year 208,015 crowns or 1,748 crowns per head, paid partly in cash and partly in the form of free lodging and other payments in kind.

After the managing staff, come the real wage-earners, the agricultural labourers.

The following table gives the most important particulars as to their number, description and number of days of work performed.

Agricultural Wage-earners: Number, Description, etc.

Number of holdings	Number of labourers engaged during the year					Number of weeks of work	Days of work performed					Number of annual workers (1)
	Permanent		Casual		Total		Care of livestock		Other work		Total	
	Number	Per cent	Number	Per cent			Number	Per cent	Number	Per cent		
238	6,181	51.6	5,789	48.4	11,970	358,731	670,955	30.1	1,560,864	69.2	2,231,819	7,434

(1) An "annual" worker is one who works at least 300 days in the year.

This table shows that about 11,970 persons were employed on the 238 holdings, of whom more than half were permanent employees, that is to say farm servants, *statare* and *torpare* to whom at least one day's work a week was assured, and day-labourers engaged for the whole year, or at

least for the whole summer season (reckoned at 200 days); all the others were day-labourers, immigrant, seasonal or casual workers taken on for briefer periods.

If we classify the 238 holdings according to the number of labourers employed, we find that only 34.9 per cent. employed 50 or more labourers (permanent and casual) whereas 65.1 per cent. employed less than 50.

The total number of working weeks amounted to 358,731; the total number of working days to 2,231,819, of which about 30 per cent were devoted to the care of live-stock.

The enquiry also shows that the labour employed per unit of area amounted on an average to 19 "annual" labourers for every 100 hectares, an average which is somewhat exceeded in Northern and Southern Sweden as the extensive forestry works in the former and the intensive cultivation of sugar-beets in the latter require more labour. The average number of working days per 100 hectares for the whole Kingdom works out at 5,638.

It is interesting to compare the number of working days per unit of area on the several holdings.

7,239 days of work were required on holdings of less than 50 hectares, 5,841 on holdings of from 50 to 99 hectares, 5,235 on those covering from 100 to 199 hectares, 5,503 on holdings from 200 to 399 hectares, 4,806 on holdings of 400 hectares, and 5,638 on holdings of more than 400 hectares.

These figures show that the amount of labour required depends on the nature of the crops cultivated and on the size of the farm, as also on the possibility of utilising available resources by an intelligent subdivision of the work.

Farming is essentially a seasonal industry; consequently the number of working days varies considerably according to the time of year. If we divide the year into two periods the first from November to April (the slack season) and the second from May to October (the busy season) we find that for the whole of Sweden 45.3 of every 100 working days belong to the first period and 54.7 to the second. But the larger the size of the estate the smaller the difference between the two periods, for it is then easier to arrange for a suitable rotation of work. We thus find that on holdings covering 400 hectares and over, 46.5 per cent of the working days belong to the winter and 53.5 to the summer season whereas on farms covering less than 50 hectares the respective percentages are 41.9 and 58.1. If we take 100 as equal to the average working month, which month is understood to be one twelfth of the annual average working year, we find that on estates of 400 hectares and over the number of working days rises from a minimum of 91.0 in January to a maximum of 116.0 in August, whereas on farms of less than 50 hectares the figures vary from a minimum of 81 in January to a maximum of 130 in July.

The total amount paid in wages to agricultural labourers amounted to 4,293,682 crowns, or an annual average of 578 crowns per labourer, *i.e.* 1.92 crowns per day. Of this sum, 67.1 per cent., that is to say 2,879,981 crowns, was paid in cash, and 32.9 per cent. or 1,413,701, crowns in kind. The ratio

however differs considerably in Northern Sweden where cash payments amount to 88.3 per cent. of the total wages.

Of the wages paid in cash 93.6 per cent. were paid as time-wages ; 0,5 per cent. in lieu of payment in kind ; 5.5 per cent. for piece-work, and 0.4 per cent as bonuses and gratuities. 69.8 per cent. of the wages paid in kind were food rations, 30.2 per cent lodging or grants of land. The average cost of the work performed by an adult male labourer per hectare of land is 110 crowns ; but on holdings of 400 hectares and over the cost only amounts to 92 crowns, rising to a maximum of 152 crowns on farms of less than 50 hectares.

§ 2. Permanent labourers, their number and distribution.

The enquiry has assembled very complete and reliable data for permanent labourers of whom there were 6,181 on the 238 holdings under consideration, 5,650 males (91.4 %) and 531 females (8.6 %).

The distribution of permanent male and female labourers among the five groups described above is as follows :

Permanent Workers : Number, Description etc.

Males										Females									
Farm servants		*Statare*		Day labourers		*Torpare*		Others		Farm servants		*Statare*		Day labourers		*Torpare*		Others	
N°.	Per cent	N°.	Per cent	N°.	Per cent	N°.	Per cent	N°.	Per cent	N°.	Per cent	N°.	Per cent	N°.	Per cent	N°.	Per cent	N°.	Per cent
231	4.1	2,669	47.2	1,728	30.6	870	15.4	152	2.7	96	18.1	112	21.1	288	54.2	13	2.4	22	4.2

This table shows that the " *statare* "or labourers paid partly in cash and partly in kind, are the most numerous class of permanent male labourers; whereas day-labourers predominate among the women. The ratios differ however in the different parts of Sweden. In the north the day-labourers account for 82.7 per cent of the total labouring population, and the *torpare* are almost non-existant.

Considered in relation to the area of the holdings on which they work permanent labourers are distributed as follows (percentage figures):

Permanent Workers: Distribution by Holdings.

		Number of Labourers	Farm servants	*Statare*	Day Labourers	*Torpare*	Others
Holdings of less than 100 hect.	Males . .	8.9	12.1	32.3	36.6	18.2	0.8
	Females .	11.3	48.4	20.0	28.3	3.3	—
Holdings of 100 hect. and over.	Males . .	91.1	3.3	48.7	30.0	15.1	2.9
	Females .	88.7	14.2	21.2	57.6	2.3	4.7

On the smaller estates the number of farm-servants, that is to say of unmarried labourers, is relatively higher, which is accounted for by the fact that such holdings are too small to provide lodging for labourers with families.

Considered from the stand-point of the kind of work they perform agricultural labourers fall into four main groups: overseeing staff, specialised workers, men in charge of live-stock, farm labourers proper.

To the first group belong all those persons who, unlike the managing staff proper, supervise other workers while themselves taking a part in the work, such as the overseers, the head stablemen, etc. To the second group belong all those wage-earners engaged on specialised manual work and subsidiary trades carried on in connection with a farm, such as carpenters, black-smiths, gardeners, foresters, machine-hands, and so forth, exclusive, however, of those engaged in the care of live-stock and domestic animals attached to the farm who belong to the third group. This group is subdivided into two sections; overseers and ordinary labourers.

The fourth and last group comprises unskilled agricultural labourers who are paid a lower rate of wages and perform the rougher kinds of work.

The 5,650 male and the 531 female labourers are distributed among the four groups in the following proportions.

Permanent Workers: Distribution by Sex in Groups According to Work Performed.

	Groups				
	1st	2nd	3rd		4th
			Overseers	Others	
Males	6.2	9.2	2.1	20.6	61.9
Females	—	16.8	40.5	31.6	11.1

If we take these figures to be valid for the whole Kindgom they would show that the great majority of the male rural population of Sweden, *i. e.* 61.9 per cent. consists of labourers engaged on work requiring no special skill. On the other hand, nearly three-fourths of the female population (72.1 %) is engaged in the care of live-stock, and of this number the majority (40.5 %) are employed as milkers.

The same figures, considered in relation to the area of the farms show the following results :

Permanent Workers: Distribution by Holdings in Groups according to Work Performed.

	1st Group	2nd Group	3rd Group		4th Group
			Overseers	Others	
Males :					
Holdings of less than 100 hectares. . .	7.3	6.9	0.6	20.2	65.0
Holdings of 100 hectares and over. . .	6.1	9.5	2.3	20.6	61.5
Females :					
Holdings of less than 100 hectares. . .	—	10.6	23.3	46.7	20.0
Holdings of 100 hectares and over. . .	—	17.6	42.7	29.7	10.0

These percentages show that on small farms the supervising staff is comparatively more numerous, and the number of skilled workers both male and female smaller, and that preference is given to women not only for milking but also in all the other branches of work connected with the care of livestock.

§ 3. Age, sex, condition, number in family and duration of service.

The previous paragraph shows the division of agricultural labourers according to sex; we will only add that female labour is a negligible quantity in east and west Sweden, but is quite important in the south where women are employed in the ratio of 12.5 to every hundred men. This high percentage is accounted for by the cultivation of beets, for which crop female labour is preferred.

The proportion between the two sexes varies, however, considerably for each group of workers, as can readily be seen by the following table :

	Farm servants	*Statare*	Day labourers	*Torpare*	Others
	—	—	—	—	—
Males . .	70.6	96.0	85.7	98.5	87.4
Females .	29.4	4.0	14.3	1.5	12.6

The women employed in domestic work and lodged and boarded by their employers form one-third of the total number of workers coming under this group whereas the number of women in the group of *torpare* is quite insignificant.

As to age (1) it should be noted that only 6 per cent. of the labourers were under eighteen. Although this figure may seem low to those who know how largely child-labour is employed in the fields, yet it is explained by the fact that almost all these boys are casual labourers.

Of minors under eighteen, 98.4 % were males and only 1.6 % females This class included a considerable number of young people of both sexes under fifteen years of age, amounting to 14.6 per cent.

The different groups of workers divide up as follows according to age :

Groups.

Age	Farm servants	*Statare*	Day labourers	*Torpare*	Others
18 and over	88.4	99.5	85.2	100	88.5
Under 18	11.6	0.5	14.8	—	11.5

The *torpare* and *statare* are never, or hardly ever, under eighteen, and this is natural as these groups consist mostly of married people; whereas minors often act as farm servants and day-labourers.

It is very interesting to compare the distribution of agricultural labourers between different age limits with a like distribution of an equal number of workers employed in other industries.

The data assembled, which cannot be given here for lack of space, confirm the well-known fact that agriculture affords employment to workers well on in years, and therefore less fit for work, in larger numbers than do other industries. This phenomenon is accounted for by the exodus from the country of the younger people who migrate to the cities or to the factories or who go abroad.

If we divide the agricultural labourers into five year groups starting from 16 years of age, as is done in the following table, the figures are :

Age	16-20	21-25	26-30	31-35	36-40	Total
Percentages	22.0	13.2	19.8	22.1	22.9	100

We find that the group from 21 to 25 years of age is the least numerous. This is certainly due to the fact that young men in their twenty-first year are called on for military service, at the close of which many of them prefer to remain in the towns and to find employment in factories. The group from 36 to 40 years of age is, on the other hand, the most numerous.

(1) The figures are not strictly accurate, as the replies do not state the date of birth, but only the years completed or to be completed within the year.

If we study the permanent agricultural labourers from the point of view of their status or condition we find the following percentage figures:

	Unmarried	Married	Widows or Widowers
Males	17.5	78.4	4.1
Females	52.6	29.9	17.5

There are no considerable variations in this regard from one region to another, but the variations are very noticeable between the several groups. For instance, out of 100 male farm servants no fewer than 96 are unmarried, whereas the unmarried *torpare* barely amount to 3.6 %. The figures for women show that the servants are all, without exception, unmarried, and that 76.9 % of the small group of female *torpare* were widows.

The enquiry also shows that agricultural labourers as a rule marry younger than industrial workers. Out of 100 permanent agricultural labourers between the ages of 20 and 24, 18.5 were married, whereas the percentage for industrial workers of the same age varies from 7.8 to 11.4 per cent. Between the ages of 25 and 29 the respective percentages are 71.8 as compared with 54.6 ; from 30 years of age upwards the difference between the two classes of workers is insignificant.

About 82.2 per cent. of the adult agricultural labourers were supporting a family. The average family consists of 5 persons, including the head and two members under 15 years of age ; but very many families, especially in the case of *statare* and *torpare*, consist of 6 persons or more.

It will not be out of place here to give a few particulars as to the length of time the labourer remains with the same employer. 15.7 per cent. of the labourers considered had served on the same farm for less than two years ; 42.4 per cent. from 2 to 10 years, and 33.4 per cent. over 10 years. The stability of employment on holdings of 100 hectares and more seems to be somewhat higher than on smaller farms, and is less in the case of women than of men. It varies, however, greatly from group to group. Farm-servants seem to the least stable class, as about half of them (46.7 %) were employed on the same farm for less than 2 years, whereas the *torpare* are the most stable ; in their case the proportion fell to 4 % ; indeed, many belonging to this group pass their whole life on one holding.

Although the conditions of employment are very different in manufacturing industries from what they are in agriculture, it is nevertheless worth while pointing out that whereas in the former from 25.2 to 36.2 per cent. of the workers remain with the same employer for less than 2 years, in the case of agriculture the figure falls to 15.7 per cent. ; that is to say that agriculture, more especially in the case of large holdings, affords more stable conditions of employment than other industries. It must, however, be remembered that the class of elderly workers is more numerous among agricultural than among industrial labourers.

§ 4. Duration of work, kind and rates of wages.

The system of accounts in use on farms made it impossible for the enquiry to ascertain the number of hours of work performed by labourers, and it therefore had to be satisfied with ascertaining the number of weeks and days of employment given during the year; indeed, complete answers could only be secured on the first point.

13.4 per cent. of male agricultural labourers worked less than 33 weeks (*i. e.* $^2/_3$ of the year); 28.4 per cent. from 33 to 48 weeks, and 58.2 per cent. 49 weeks or more (practically the whole year). The figures for women are 7.4, 16.6 and 78.07 per cent. The superiority of women in this respect is, however, only apparent as it depends on the fact that most of them are employed as milkers and therefore have to work also on Sundays, but as a matter of fact, the number of hours of work per day is much less for them than for men.

As a rule it may be said that a agricultural labourer works 45 weeks in the year and a woman 48. But to obtain a more accurate idea of the amount of work accomplished by each labourer it is well to consider the number of days of work as compared to the size of the estate.

The data secured only refer to 5,031 male labourers (or 81.4 % of the workers under consideration) and to a small number of women (only 340).

Number of Days' Work performed during the Year (*per* 100 *labourers*).

	Less than 200	From 200 to 224	225 to 249	250 to 274	275 to 299	300 to 324	325 to 349	350 or more	Average number of days' of work per labourer
Men.	15.3	4.5	6.4	8.9	24.4	23.3	7.7	9.5	270
Women	5.9	3.8	3.5	2.4	3.8	8.0	9.4	63.2	326
Men:									
Holdings of less than 100 hect.	16.5	5.0	7.0	14.6	25.5	15.7	5.0	10.7	265
Holdings of 100 hect. and over.	15.2	4.5	6.3	8.5	24.3	23.9	7.9	9.4	270
Women:									
Holdings of less than 100 hect.	5.3	—	5.3	—	10.5	10.5	—	68.4	331
Holdings of 100 hect. and over	5.9	4.1	3.4	2.5	3.4	7.8	10.0	62.9	326

This table shows that only 17.2 per cent of the male labourers worked 325 days or more, that is to say on Sundays also, whereas the proportion of women was 72.6 per cent. It also shows that on the larger holdings the number of labourers who work for more than 300 days is larger than on the smaller farms (41.2 % instead of 31.4 %) whereas the reverse is the case with the women (78.9 % against 80.7 %).

The annual average number of days of employment for men is 270 and for women 326 (1).

The enquiry next takes up the question of wages. On this head it must be remembered that in reckoning the value of wages in cash or in kind paid to the labourer only those workers who remained with the same employer for at least 49 weeks, or for 300 days, were taken into account. Their number is 3,701, or 59.9 per cent. of the permanent labourers. It must also be remembered that by "cash wages" are meant all forms of remuneration in cash (time-wages, payment by piece-work, bonuses, gratuities, indemnities, etc.), and by "wages in kind" is meant the value, calculated at the selling price in the locality in which the labourer is employed, of all goods supplied to him (exclusive therefore, of medical attendance, free insurance, and similar services which are often provided) of his lodging, and of grants of land, made to him.

The total amount of wages paid to 5,161 agricultural labourers was 2,478,163 crowns; of these, 2,323,098 crowns (93.7 %) were paid to men and 155,065 (6.3 %) to women. The percentage ratio of cash wages as compared to wages in kind paid to males was 60.1 % as against 39.9 %; for women 68.9 % as against 31.1 %.

The wages were distributed between the several groups of labourers in the following proportions:

Percentage of Different Classes of Workers Paid in Cash and in Kind.

	Farm servants	*Statare*	Day labourers	*Torpare*	Others
	%	%	%	%	%
Men:					
Wages in cash.	47.1	48.7	92.2	47.9	55.9
Wages in kind — food rations. .	52.7	41.9	2.3	0.3	37.0
Wages in kind — lodging and land	0.1	9.4	5.5	51.8	7.1
Women:					
Wages in cash.	42.8	62.9	90.7	57.9	42.6
In kind — food rations.	56.6	28.2	5.2	—	53.3
In kind — lodging and land . .	0.6	8.9	4.1	42.1	4.1

(1) Labourers employed in the care of live-stock generally have one day off every three or four weeks, other labourers have about six days holiday a year.

This shows that in the case of farm-servants, both men and women, wages paid in the form of food rations have great importance (52.7 % for the former, 56.6 % for the latter); in the case of *torpare* lodging and land grants are of more importance; while day-labourers receive almost the whole of their wages in cash (92.2 %).

The annual average cash wage for male agricultural labourers throughout the Kingdom was 428 crowns and for women 258 crowns; but in the case of 56.9 % of the former and as many as 83.8 % of the latter the average did not amount to 400 crowns. Moreover, the wages paid to the several groups of labourers differ considerably, for while the average wage of a day-labourer amounts to 635 crowns a year, farm-servants do not receive more than 296 crowns. In the case of women the best paid are the *torpare* (365 crowns), the worst the unspecified labourers (188 crowns).

The significance of these differences becomes more apparent if we consider the total average annual wage, adding together that paid in cash and that in kind. It then amounts for men to 707 crowns, for women to 375 crowns, varying for the former from 514 crowns (*torpare*) to 738 (*statare*); for the latter from 287 crowns (*day-labourers*) to 630 (*torpare*). We thus see that the *statare*, the typical agricultural labourer receiving a mixed wage, is the best paid of the men, the *torpare* of the women.

The wages paid also depend largely on the kind of work performed; and within each of the groups referred to it varies according to whether the wage-earner acts as overseer, or as skilled worker, or as mere labourer. Thus, for instance, in the group of farm-servants, the average wage for the whole group is 628 crowns, but the overseer earns from 841 to 940 crowns, while the ordinary servant is only paid 587 crowns.

Similarly for the group of day-labourers the wages are 1,082 for foremen, 647 crowns for ordinary labourers, and the average annual wage for the whole group works out at 785 crowns.

If we consider the wage in relation to age and condition we get the following figures:

Wages according to Age and Condition.

	Unmarried under 18	From 18 to 24		25 to 39		40 to 54		55 and over		Age unknown		Total for all age groups	
		Unmarried	Married and widowed	Unmarried	Married and widowed	Unmarried	Married and widowed	Unmarried	Married and widowed	Unmarried	Married and widowed	Unmarried	Married and widowed
Men . . .	446	577	713	711	756	741	769	703	669	632	664	590	740
Women . .	473	458	211	461	308	444	287	388	303	391	156	447	291

This table shows that the wages of married men are almost always higher than those of the unmarried; the reverse is true in the case of women as these latter, having to attend to their domestic duties, have little time

available for other occupations. Moreover, men's wages as a rule rise gradually to a maximum which they reach when about 40 to 54 years of age, after which they gradually decline. This occurs also in the case of women but in their case the maximum is reached between the ages of 25 and 39. In some cases, however, wages continue to rise even after the usual age-limit for the higher rate has been reached. This occurs more especially in the case of members of the managing staff employed in positions of trust who have worked for many years on the same holding.

It remains to be seen in what measure wages are paid in kind ; the results of the enquiry on this point are set forth in the following table :

	Number of labourers	Percentage of workers paid —			Average annual wages (in crowns) per labourer paid —		
		Exclusively in cash	In kind		Exclusively in cash	In kind	
			Partially	Wholly		Partially	Wholly
Males. . .	3,287	14.1	85.2	0.7	575	372	401
Females. .	414	34.3	65.7	—	266	432	—

The payment of wages exclusively either in money or in kind is the exception to the rules of mixed wages ; nevertheless the ratio between the two kinds of wage varies considerably according to the group to which the labourer belongs. Thus, out of 100 *statare*, 99,8 are in receipt of mixed wages, whereas only 50.4 per cent. of day-labourers are thus paid.

The enquiry has also ascertained that when the payment in kind exceeds 50 per cent. of the total wage the average wage of the labourer declines.

The following data have been obtained on the ratio between the various kinds of wage :

	Number of workers	Percentage of workers paid —			Average wage (in crowns) per worker paid		
		Exclusively in time-wages	Partially also		Exclusively in time-wages	Partially also	
			on piece work	by bonus		on piece work	by bonus
Males. . .	3,287	94.1	1.8	4.1	299	676	895
Females. .	414	96.6	3.2	0.2	372	450	418

We thus see that the great majority of permanent agricultural labourers are paid time-wages ; piece-work is an inconsiderable item and is confined almost entirely to forestry work ; the bonus system is used mainly in the case of workers employed in the care of stock and in gardening.

To complete this review of facts relating to the wages of permanent agricultural labourers something must be said of the earnings of the labourers's family, for in the country, much more than in towns, the family must be considered as a working and earning unit. The enquiry secured complete returns on this head for 781 labourers' families, in 754 of which the head of the family was a man, and in 27 a woman.

We give below two tables showing the data for 754 families, the heads of which were men, and in which at least two members of the family worked on the same holding. Taking into account only the income earned by the head of the family we get the following percentages figures:

Earnings of Heads of Families.

Families of—	Number of fomilies	Percentage of families having an income of —								
		Less than 400 crs.	400 to 499 crs.	500 to 599 crs.	600 to 699 crs.	700 to 799 crs.	800 to 899 crs.	900 to 999 crs.	1000 to 1099 crs.	1100 crs. and over
2 members	55	5.5	10.9	16.4	30.9	20.0	12.7	1.8	—	1.8
2-5 »	373	0.5	5.6	11.0	27.9	28.7	13.7	7.2	3.2	2.2
6-9 »	290	0.3	2.1	6.2	20.7	33.8	19.0	9.0	4.8	4.1
10 or more	36	—	—	2.8	19.4	50.0	13.8	5.6	5.6	2.8
Total . . .	754	0.8	4.4	9.2	24.9	31.6	15.7	7.4	3.7	2.9

But if we take into account the income earned by all the members of the family we obtain the following figures:

Earnings by Families.

Families of	Numher of families	Percentage of families having an income of —								
		Less than 400 crs.	400 to 499 crs.	500 to 599 crs.	600 to 699 crs.	700 to 799 crs.	800 to 899 crs.	900 to 999 crs.	1000 to 1099 crs.	1100 crs. and over
2 members	55	—	—	9.1	10.9	20.0	14.5	16.4	16.4	12.7
2-4 »	373	—	1.3	1,3	8.6	13.2	19.3	15.8	9.4	31.1
6-9 »	290	—	0.3	0.7	3.4	10.3	11.4	12.8	16.6	44.5
10 aud more.	36	—	—	—	2.8	2.8	16.7	11.1	19.4	47.2
	754	—	0.8	1.6	6.5	12.1	15.8	14.4	13.1	35.7

This table clearly shows that if we only take into account the wages earned by the head of the family, 39.3 per cent. earn an annual income of less than 700 crowns; 54 per cent. earn from 700 to 999 crowns ; and only 6.6 per cent. earn an income of 1000 crowns or more. But if we add the wages received by other members of a family a notable increase occurs. Out of 100 families only 8.9 per cent. earn incomes of less than 700 crowns; 32.3 per cent. between 700 and 999, and not less than 48.8 per cent. incomes of 1000 crowns and over.

If we consider the size of a family we see that the larger families have, as a rule, much larger incomes. A family consisting of two persons (husband and wife) only earns more than 1000 crowns a year in 29 cases out of a hundred, whereas a family of from 3 to 5 members attains that figure in 40 cases out of 100, and families of from 6 to 9 members in 60 cases out of 100.

Now that we have examined the wages of permanent labourers who have been in the same situation for at least one year, we will give a few figures for permanent labourers as a whole.

This class consists of 6,181 individuals, who received in wages (cash and kind) a total sum of 3,529,566 crowns. Their weekly wages, by sex and by group were as follows :

(*A*)

	Number of labourers	Percentage of agricultural labourers receiving a weekly wage of —									
		Less than 8 crowns	From 8-9.9 crowns	From 10-11.99 crowns	From 12 to 13.99 crowns	From 14 to 15.99 crowns	From 16 to 17.99 crowns	From 18 to 19.19 crowns	From 20 to 21.99 crowns	22 or more crowns	Average weekly wage in crowns
Men	5,650	9.8	11.8	17.2	23.3	19.3	9.5	4.3	2.2	2.6	13.06
Women	531	58.8	20.3	11.1	4.9	3.2	0.9	0.4	0.2	0.2	7.50

(*B*)

		Farm Servants	*Statare*	Day Labourers	*Torpare*	Others	Total
Weekly wage (crowns)	Men . .	12.42	14.56	12.58	9.75	12.10	13.06
	Women	10.19	9.30	5.71	8.87	9.12	7.50

These tables clearly show how low are women's wages as compared with the wages paid to men, women earning in fact but little more than

half of what men earn. More than 80 per cent. of the women engaged in agriculture earn less than 10 crowns per week, whereas in the case of men the percentage is barely 21.6. This difference in the wages paid to the two sexes is noticeable also within the same group. The low rate of wages paid to female day-labourers (5.71 crowns per week) is noteworthy and is accounted for by the fact, already mentioned, that most of these women are engaged in milking, only working a few hours a day, and therefore earning low wages. If we compare the wages received by agricultural labourers employed on the same farm for at least 49 weeks in the year, with those received by all workers without distinction it can easily be shown that the more skilled workers, and therefore the better paid, are those who change their situation less frequently.

The enquiry also collected some data on the daily wages paid to 5,031 labourers. The total average wage of the men amounted to 2.07 crowns per day, that of the women to 1.16 crowns per day. Out of 100 male labourers, 44.8 earn less than 2 crowns per day; whereas the ratio for 100 female labourers is 92.9 per cent; and the only labourers who receive 4 crowns a day are men in the ratio of 0.7 per cent.

§ 5. Casual labourers, their number and distribution.

The information dealing with this class of labourers is much less complete and reliable than that so far given.

On the 238 estates for which the enquiry assembled data, temporary employment was given to 5,789 persons, and detailed information could only be secured for 2,450 of these.

Of this number 75.4 per cent. resided in localities near the estate on which they worked; 16.9 per cent. in other parts of the Kingdom, and 7.7 per cent. were foreign immigrants. As to sex 57.2 were males and 42.8 females, but the proportion of women to men on the larger estates of 100 hectares and over rose to 44.1 per cent., falling to 36.3 per cent on the smallest farms. When urgent field work has to be done it becomes necessary to employ even child-labour. This is shown by the fact that 3.16 per cent. of the 2,540 labourers under consideration were under 18 years of age, and half of this number were under fifteen. The distribution of casual labourers according to age is clearly shown by the following table :

	Number of labourers	Percentage of casual labourers aged —		
		less than 18	from 18 to 54	55 and over
Males . . .	1,401	34.3	49.3	16.4
Females . . .	1,049	27.9	64.7	7.4

The difference between these percentages and those for permanent labourers is notable, more especially in the case of the number of workers under 18 years of age.

The differences are still greater if we consider these labourers from the point of view of their condition. The percentages under this head are as follows :

Men				Women			
Over 18	Percentage of adult men who were—			Over 18	Percentage of adult women who were—		
	Bachelors	Married men	Widowers		Spinsters	Married women	Widows
921	43.8	51.0	5.2	856	37.0	56.6	6.4

The ratio of unmarried to married for the two sexes is almost the reverse of that shown in the case of permanent labourers. This difference points, among other things, to the fact that casual labour, owing to its uncertainty, hinders men from setting up a family, whereas it is well suited to peasants' wives, who are prevented by their domestic duties from becoming labourers, but who find in casual work a means of earning a supplementary wage.

§ 6. Duration of work, kind and rates of wages of casual labourers.

The particulars on these two points are less to be relied on than are the data given above. In considering them we should always bear in mind that they are only approximately correct.

The 5,079 casual labourers under consideration performed about 490,204 days of work ; or an average of 81 to 89 days per labourer, which is about equivalent to the 12 or 15 weeks of the busy summer season. The average duration of work in the north of Sweden is considerably shorter (an average of 46 days) for obvious climatic reasons ; shortest of all is the working season for immigrant labourers from other parts of the Kingdom. The season falls into two periods : from the beginning to the end of June they do the preparatory work in the beet fields ; they then return to their own localities for the hay harvest ; after which they return to lift the beets, being employed in all for some forty days. The working season for foreign immigrants is considerably longer, lasting from April to October or November, some 6 to 8 months in all, comprising from 150 to 200 working days.

The few following particulars may be added as to wages.

The 5,789 agricultural labourers under consideration received in wages 754,116 crowns, of which 5,9 per cent. was paid in kind, 23.6 per cent. for

piece-work, and the remainder in cash time-wages. The percentage paid for piece-work is noticeably higher than in the case of permanent labourers, for whom it represented only 1.87 per cent. This form of payment is common in the case of labourers employed on the beet crop.

The average wage for the season varies from 128 to 135 crowns ; it rises to 188 crowns for male adults ; falls to 112 for female adults, and to 73 crowns for boys. The wage of foreign immigrants is highest, amounting to 311 crowns, to which must be added the not inconsiderable sum allowed for travelling expenses, which, in the case of labourers from Russian and Austrian Poland, is reckoned at 60 crowns per head.

The daily wage averages 1.44 crowns per head for the whole group ; falling to crowns 1.06 for youths under 18 and rising to 2.23 crowns for men The lowest wage is that paid to women for the reason already referred to more than once, *i. e.* that most of these women are employed as milkers and work only a few hours each day.

(*To be continued*).

NOTICES OF SOME RECENT PUBLICATIONS RELATING TO AGRICULTURAL ECONOMY IN GENERAL.

GERMANY.

PRINGSHEIM (OTTO) : GRUNDBESITZVERTHEILUNG UND INNERE KOLONISATION (*The Distribution of Landed Property and Home Colonisation*). « Annalen für Soziale Politik und Gesetzgebung », Berlin, Vol. IV, Nos. 3 and 4, 1915, pp. 384-406.

During recent years German agrarian policy has been inspired by the idea of the superiority of small and medium-sized holdings over large holdings. The author of this article, while recognising that the area cultivated as large holdings has in fact diminished, asserts that, at any rate where large holdings have been worked on scientific lines and conducted as capitalistic enterprises in the strict sense of the term, their number has increased rather than diminished. The fact is that large-scale farming enjoys certain advantages. With an important amount of produce to offer it holds a stronger position in the market, and can also produce more cheaply, while in addition, in the majority of cases, offering produce of superior quality, thanks to the advantages which it possesses in the matter of employing labour and making use of motor power ; so that it is not very probable that from now onward small-scale cultivation will gain upon cultivation upon a large scale.

Admittedly, under the provisions of the laws relating to home colonisation of 1886, 1898, 1902 and 1908, there have been purchased up to the end of 1913, n the Provinces of Posen and, of Eastern Prussia, an area of 438,560 hectares, on which there have been established 295 villages accommodating 128,232 inhabitants comprised in 20,000 families.

In smaller states like Oldenburg and Mecklenburg great efforts have been made in the same direction ; nevertheless only a small proportion of the agricultural labourers have consented to establish themselves in this manner. From 1908 to 1913, a total of 3,785 holdings of an area less than 2 ½ hectares have been formed. Of these 1,636, that is to say 43 per cent., have been assigned to industrial workers, and 2,149 (57 per cent.) to workers in agriculture. Since the formation of the *Rentengüter* in the Province of Posen, 586 holdings have been taken up by industrial workers and only 156 by agricultural labourers. The wives of the latter are still less than their husbands attracted by the idea of possessing a plot of land, and far from showing willingness to give the help which the management

of their *Rentengut* demands, many of them have but one desire — to reduce their contribution to a minimum.

The writer adds that the opposition of the communal authorities, who fear an increase in their burden of poor relief, the rising cost of land and of building construction and, lastly, the political colour of many small-holdings associations, are other factors which hinder the formation of workmen's holdings. Moreover, according to the writer, home colonisation which consists in the subdivision of existing holdings must be distinguished from colonisation which deals with new land. The acquisition of uncultivated land by co-operative societies or associations, which subdivide it, is the method by which colonisation can develop most rapidly, and the prospects for colonisation are most promising in this direction. It is true that the breaking of uncultivated land is an expensive operation, but where home colonisation has been proceeding for a long time the price of land and the cost of building are so high as to make the formation of small holdings a very difficult matter. In any case, where intensive cultivation is undertaken the large holding is the better provided with the machinery and buildings which are necessary, and its subdivision, therefore, becomes, economically speaking, more disadvantageous. It is to be anticipated, besides, that, thanks to the progress of science, an industrial development of districts still uncultivated will take place Peat can be utilised for the production of gas possessing valuable heating power, and furnishes in addition a number of useful by-products such as tar and sulphate of ammonia. It becomes possible thus to establish on the moors central electric stations capable of furnishing power to the district at a cheap rate.

BELGIUM, DENMARK, HOLLAND.

SCOTT (J. W. ROBERTSON) : OUR AGRICULTURAL RIVALS. "The Quarterly Review," No. 446 January, 1916, pages 16 to 37.

Much has been written in England to throw light on the somewhat puzzling fact that countries like Belgium, Denmark, and Holland are able to export immense quantities of agricultural and market garden produce to England and to compete successfully with the English farmer notwithstanding that he has the market at his door.

In the article under notice the author (reviewing several books relating to the countries named) tries to summarise the lessons to be learnt. From Denmark, he tells us, there are to be learnt three lessons of the simplest possible kind. "The first is the lesson of adaptability, of enterprise, of willingness to march with the times. The second is the lesson of education and character. The third is the lesson of mutual aid."

The success of Holland is attributed to the high degree of technical skill of the Dutch farmer, to his readiness to change his crops and his methods, to the development of co-operation, and to the care with which the Govern-

ment, while aiding the farmer in many ways, refrains from taking any action which could impair his independence and initiative.

Belgium, again, owes its agricultural success to its transport facilities, to the excellent cultivation and hard work of its farmers, to the large amount of artificial manures used, to co-operation, and to the fact that the low rate of industrial wages prevents town life from offering an attractive alternative to life on the land.

GREAT BRITAIN AND IRELAND.

JOHNSTON (J. H. CLIFFORD): A NATIONAL AGRICULTURAL POLICY: THE FINANCE OF OCCUPYING OWNERSHIP AND CO-OPERATIVE CREDIT. London, 1915. P. S. King and Son. 8 vo., 40 pp.

The writer of this pamphlet has endeavoured to solve a difficult problem, that of finding a system of State-aided land purchase which shall be sufficiently elastic to be always applicable, in spite of any fluctuations which may occur in the rate of interest at which the State is able to borrow money. His solution (subject to certain stipulations) is as follows:

(1) The purchase price to be fixed at 22.24 years' purchase of the net rent.

(2) The landlord to be paid one-fourth of the purchase price in cash, and to receive State 3 % bonds of actual selling value equal to the remaining three-fourths.

(3) The farmer to repay the amount advanced by amnnuities of £4 10*s.* 6*d.* per cent. for 18 years and £2 18*s.* 0*d.* for the following 19 years.

For an explanation of the principles upon which this solution is based and an exposition of its practical working we must refer the reader to the pamphlet itself. Suffice it to say that the author starts from the assumption that there is an almost invariable difference (approximately 1 ½ per cent.) between the current rate of interest at which the State can borrow money and the rate of interest which the net rent of a farm represents in comparison with its capital value.

PROTHERO (ROWLAND E.), M. P.: PATRIOTISM AND AGRICULTURE. "The Edinburgh Review," No. 454, October 1915, pages 406 to 425.

The question of increasing the home production of food is, in this article, treated from the standpoint of the farmer. Farming, Mr. Prothero points out, is a commercial enterprise run for profit, and a farmer cannot reasonably be expected to sacrifice his livelihood, any more than an artisan can reasonably be asked to give his labour for nothing.

That there is under-cultivation is, according to the author, undoubtedly true and practical men conversant with the business of farming find it

easy to fix on the three principal causes of a palpable fact. These are personal character, insufficient capital, and the relation between prices and costs of production. Of these the last is the most important.

In manufacture, the larger the output, the smaller in proportion becomes the cost of production and the cheaper the product. In agriculture, on the contrary, increased production can only be obtained by increased expenditure, and there comes a point when the larger outlay ceases to be remunerative. This point is mainly regulated by the prices obtainable for the produce, and those prices are fixed by other countries where expenses of cultivation are not so high.

Mr. Prothero thus summarises his argument : Consumers may urge the farmer to extract the *maximum* from the soil in order to make food cheap. But he has an answer which cannot be called unreasonable. He says " I cannot grow more wheat per acre, unless I spend more money. I cannot charge you what the wheat actually costs me, because I have no control over prices. They are imposed upon me by Chicago, and depend on conditions which are totally different from those in this country. Therefore, the only thing I can do is to produce, not as much as the soil can be made to yield, but as much as I think I can afford. "

To this Mr. Prothero adds the dictum : " Cheap food is a national boon ; but the price which the nation pays is the under-cultivation of land at home. "

RUSSIA.

ELFRING (ÖSTEN) : VERMÖGENSBILDUNG KLEINBÄUERLICHER ANSIEDLER IN FINLAND (*The Evolution of the Small Holding in Finland*). Helsingfors, 1915. 1 vol. in-16, pp. 527.

Home colonisation presents one of the chief problems of the economic life of Finland. For a long time the problem has made itself felt more and more throughout the whole social and economie life of the country ; so that in the last ten years the State has attempted with constantly increasing energy to find a solution.

M. Elfring, Inspector of Colonisation in Finland, in the book indicated above, examines the whole home colonisation policy of the last ten years. Analysing carefully, from the statistical, economic and business point of view, a certain number of small peasant holdings, and pointing out the general tendency shown in the formation of small holdings, he seeks to determine whether the policy followed up to the present time has had the effect of strengthening the peasant's economic position on the new land, and whether the new agricultural units which have been formed are calculated to improve the condition of the people and diminish their needs.

The book which contains numerous statistics and monographs (355 pages) is in two parts. In the first the writer outlines the agricultural

organisation of Finland and describes the efforts in the direction of home colonisation made in the country. He next gives a brief description of the material upon which he has drawn and of his method of investigation ; and then deals with the distribution of capital in agricultural undertakings. A description of the natural and economic conditions of the peasants' holdings, of the peasants' mode of living and of the amount of their indebtedness, closes the first part.

In a special section the author examines the peasants' assets and liabilities, the changes in their family budgets, the division of the annual income and interest, salaries and profits, the increase or decrease in the net patrimony in different centres of colonisation, classified according to the different factors which influence the economic position of the peasants.

The author concludes that the building up of the patrimony of the peasants is undoubtedly taking place, and that the methods so far followed are capable of yielding good results in the future.

We limit ourselves at present to these brief notes on the book in question, returning to a more detailed study of it in an early number of the *Review*.

RUGGERI ALFREDO, gerente responsabile.

INTERNATIONAL INSTITUTE OF AGRICULTURE
BUREAU OF ECONOMIC AND SOCIAL INTELLIGENCE

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Part I: Co-operation and Association

BRITISH INDIA.

PRIMARY SOCIETIES ACCORDING TO THE REPORT OF THE COMMITTEE ON CO-OPERATION.

In the March number of the *Review* we dealt with that part of the recently published Report of the Committee on Co-operation which relates to the constitution and working of Central and Provincial Banks. It was to the situation of such central financing institutions that the attention of the Committee was specially directed, and for the most part, it is to these institutions that the Committee's recommendations relate. It is obvious, however, as the Committee say in their Report, that " the financial stability of the higher class of bank, though dependent on many considerations peculiar to that class, must always in the ultimate resort be dependent upon the soundness of the primary societies on which the whole structure rests. " It is for this reason that the Committee reviewed very carefully the present position of the primary societies; and in the following pages we wish to present somewhat briefly the Committee's findings and criticisms under the three heads of (1) The constitution, and management of primary societies, (2) The composition and employment of their capital, and (3) The arrangements for their inspection and audit.

§ 1. The constitution and management of primary societies.

It may perhaps be worth while noting that the name " Primary " society is used for the first time in the nomenclature of the Indian co-operative movement precisely in the present Report. In all official returns societies are classified as Agricultural, Non-Agricultural or Central; in the Report the term " Primary " is used to denote the first two classes. The

number of Primary societies in India at the date of the Committee's enquiry was 14,566, of which 13,715 were Agricultural societies.

Ordinarily — it must be borne in mind that we are presenting throughout the opinions of the Committee — there should be one society to one village and one village to one society, but the law allows that the members of one tribe, class, caste or occupation may form a single society even if they do not reside in the same village. Often, too, a group of villages will form a suitable unit for the formation of a society. The essential principle to be followed is clear — that the members should be " so closely in touch with one another that they are willing to be, and can be both in name and in fact, jointly responsible. " The average membership of an Agricultural society is 41, the average by provinces varying from only 16 in the Central Provinces to 91 in Coorg. The members are for the most part small peasant owners and occupancy tenants. There is in some parts a slight tendency to exclude poor but deserving persons of the artisan or labourer class, and this may occasionally work hardship. However, there would be great danger in forcing the present members to accept the poorer classes, and all that can be done with advantage is to teach the members the principles of selection and leave them to decide in individual cases.

Great caution needs to be exercised in granting registration. The Registrar should in every case call for a full report from the organisers and should ascertain (1) whether the proposed members have really assimilated the principles of co-operation, (2) whether they appear to be too involved in debt to make a society successful (and for this purpose a statement showing, though not in great detail, the assets and liabilities of intending members should be submitted), (3) whether adequate working capital is available in the movement, (4) whether the applicants are men of good character, and the village as a whole free from the taint of litigiousness, (5) whether means are at hand to provide for the necessary supervision of societies when formed. The Registrar should also inform himself as to the suitability of the secretary proposed. It is not essential that the Secretary should be a member of the society, and there is no objection to his receiving some remuneration for his services. As far as possible, his duties should be purely clerical.

Two question of considerable importance have arisen in connection with the organisation of societies, namely, (1) whether special powers should be conferred on societies to enable them to ascertain accurately the debts of their members, and (2) whether it is right for the society, to pay off the whole of the ascertained debts of an applicant for membership on his entry into the society.

With regard to the first, the case which calls for action is that of a creditor who refuses to supply a statement of the debt due to him, and there is no objection in principle to giving the societies power to call for such a statement, and legislation in this sense might be tried experimentally. The case of an applicant for membership who wilfully conceals his indebtedness should not arise, since *ex hypothesi* the members of a society should be

sufficiently well acquainted with the circumstances of their neighbours to prevent the election of a debtor of this type.

On the whole it is not advisable that a society should pay off the debts of a member on election. If the creditors are importunate no other course may be practicable ; but it is much better that the society should assist the member to pay off his debts gradually and by his own exertions. A society, by assuming the whole burden of prior debt without any contribution of effort from the member himself, may do much to weaken the man's strength of character.

It is sometimes argued that, as only an infinitesimal part of the agricultural population is at present included in co-operative societies, an energetic propaganda should be undertaken to extend the movement. This seems to the Committee to be inadvisable. In many parts of India, as things are, it would be quite impossible to arrange for the proper supervision of societies, and it would be inviting disaster, therefore, to form societies there. It is much better that the movement from now onward should spread gradually by the force of example, and that the Registrars, following a policy of concentration and caution, should seek to improve the quality of societies rather than add to their number.

§ 2. The composition and employment of capital.

The capital of agricultural societies is composed approximately as follows : —

	Lakhs of rupees
Shares	49.00
Deposits	72.43
Loans	247.10
Reserves	24.00

The societies have a small source of income in entrance fees for which no figures are available. The fees charged are small and there is no evidence that charging a fee has in any case tended to exclude poor men from the societies. The Committee does not consider it a matter of any importance whether they are levied or not.

Shares.

In six provinces share capital is of sufficient importance to be considered an integral part o fthe system. These provinces are Madras, United Provinces, Punjab, Burma, Coorg and Ajmer. In certain of the societies in Burma the shares are of Rs. 10 each ; in Coorg they are of Rs. 10 or Rs. 20 ; in Ajmer Rs. 5 ; and in Madras, one rupee only. All these shares are as

a rule payable on admission and give no right to participation in any profits which may be earned. In the Punjab, in the United Provinces and in a large number of the societies in Burma shares have a face value of from Rs. 10 to Rs. 100 and are payable by yearly or half-yearly instalments spread over ten years. At the end of the ten years the shares are usually withdrawable, and in all three provinces, after ten years, three-fourths of the annual profits are distributed among the shareholders in proportion to their paid-up shares. During the ten years, in the United Provinces and Burma, the whole of the profits earned are carried to the reserve fund ; in the Punjab during the same period only a quarter of the profits are carried to the reserves and the balance is distributed among the members in the form of new shares.

These somewhat elaborate share systems are open to certain criticisms. The original shareholders may be tempted to limit the admission of new members, and in any case their admission is made difficult by the fact that the older members, by their payments, have acquired something in the nature of a vested right in the future profits of the society. If a new member on admission be required to pay up the same amount of share capital as has been paid up by the older members the result will be to exclude poor men from membership. Further, the withdrawal of share capital after ten years may prove inconvenient to the society ; and, lastly, as the number of shareholders increases the value of the dividends received by the later members will probably be less than that of the dividends which the earlier members received.

Ordinarily a maximum dividend on shares should be fixed, and may suitably be the ordinary rate charged by a society on its loans.

Shares or instalments on shares are sometimes deducted from loans granted to members. The practice is not uncommon in Europe, and though theoretically it may be open to objection, there is no sufficient reason for insisting on its discontinuance.

Deposits.

Co-operative societies have so far not been very successful in attracting deposits. Whereas in Germany more than 87 per cent. of the working capital of the Raiffeisen societies consists of deposits, in India the corresponding percentage is only 18. In some provinces a certain proportion of members' deposits consists of compulsory deposits which members are required to make at stated intervals, but in the opinion of the Committee small instalment shares are preferable to a compulsory deposit system, as a means of inculcating thrift. Deposits are probably made as a rule for one year, though no detailed statistics are available. In a few cases deposits are accepted at call, but it would be advisable to refuse deposits on these terms, at least for some time to come. The only exception which might profitably be made is in the case of savings deposits which, with the object of encouraging thrift, might be accepted repayable at call, a few day's notice being required for each withdrawal.

Though there is at present little likelihood of local societies borrowing an excessive amount, yet it is necessary that each society's borrowing power should be assessed at a definite sum either by the Union or by the Central Bank.

Normally the deposits are repaid with commendable punctuality, and even after the outbreak of the present war societies have, with very few exceptions, repaid such depositors as claimed withdrawal.

Loans.

Primary societies make use of loans from four sources : (1) from Government, (2) from Central and Provincial Banks, (3) from other societies, and (4) from private individuals and institutions. The amount of capital in lakhs of rupees from the first three sources is as follows : Government 7.87, Provincial and Central Banks 216.80, Other Societies 22.43

A loan from one primary society to another requires the sanction of the Registrar, and the Committee recommend that sanction for direct loans should rarely be given. The practice of lending directly is likely to lead to some confusion of liabilities which would make it a difficult matter for the Central Bank of the district to forecast the calls that will be made upon it.

Loans from individuals are not distinguished in the returns from deposits from non-members, and the principles which should govern the receipt of deposits apply with equal force to the acceptance of such loans.

Proportion of Capital owned by Societies.

The proportion of the total working capital which is owned by the societies is, for the whole of British India, 22.3 per cent. This is exclusive of members' deposits, and if these be included the proportion rises to 31.4 per cent. The Committee in this connection say : " It is in our opinion most advisable that the growth of this form of capital which conduces so greatly to the financial stability of societies, should be encouraged in every way, partly by the issue of shares, but chiefly by the building up of reserve funds, with the help of a large margin of interest, and we have no sympathy with the view which has in one province been put before us, that this class of income should be discouraged as tending to make societies, prematurely independent of control. "

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The total borrowing powers of a society are fixed by the Central Bank and the Registrar, and the amount which the society can give out in loans is determined by this limit. In addition it is usual for the General Meeting to fix the limit up to which the committee may borrow without its sanction,

and it is becoming increasingly the custom for the General Meeting to fix also the limit of each member's borrowing power. In a newly formed society it is a difficult matter to fix a limit to the borrowing power of individual members. Members join the society for the purpose of borrowing and very often, if not indeed normally, they wish to borrow fairly large sums at once for the purpose of freeing themselves from prior debt. It is to the society's interest to pay off the member's old debts as quickly as possible, as the member's economic position will thus be improved and the general credit of the society strengthened. When, however, most of the old debts have been settled it becomes comparatively easy to estimate each member's needs for the agricultural work of a normal year, and to assess his credit on the basis of his character, his earning capacity and the value of his property.

It has already been decided by the Government of India that it is not possible to restrict loans solely to productive purposes. There are certain social or ceremonial expenses which the Indian cultivator must incur, and it is preferable that to meet such expenses he should have recourse to his co-operative society rather than to a money lender. Fortunately loans for unproductive purposes form only a small proportion of the total loans, the bulk of which are for cultivation expenses, the purchase of cattle and the repayment of old debt. Minor objects for which loans are made are the payment of land revenue, the holding over of grain for a fair market, purchase of fodder, maintenance expenses, litigation, purchase of implements, trade and education. Co-operation at present cannot be of much assistance in the carrying out of expensive permanent improvements on land, which are, however, financed by advances under the Land Improvement Loans Act.

Practice with regard to the repayment of loans is not uniform. In Burma the byelaws classify loans as : — (a) Loans for seed, food, cultivation expenses and fodder, (b) Loans for the purchase of carts, or cattle, the liquidation of small debts, and for house-building, and (c) Loans for the liquidation of large debts, for the purchase or redemption of land and for expensive improvements. Loans of the first class must be repaid after the next ensuing harvest ; of the second class in 2 or 3 years ; of the third class in 3 or 4 years. The Committee consider that a somewhat similar classification should be adopted for each province.

It is not a regular practice of the societies to require sureties for loans. In the Central Provinces it is optional upon the part of the Committee of Management to insist upon sureties, and in other provinces such as Burma, Coorg and Assam they are required only in exceptional cases. The Committee consider that it should be made a general rule to call for sureties and to proceed with rigour against a borrower's sureties in the case of his default.

Movable property such as cattle or carts is sometimes accepted as security for loans and in some provinces mortgages on land are taken as collateral security in addition to sureties. There are difficulties of various kinds in dealing with mortgages on land and the Committee recommend that the practice of taking a mortgage on immovable property should be used very sparingly. In many cases, owing to the peculiarities of the land tenure sys-

tem, it is difficult to obtain a valid mortgage, and in any case a co-operative society would naturally always be extremely reluctant to proceed to foreclosure and sale. The only alternative to sale, namely that the society should take possession of the land for a period of years, is cumbersome.

The first duty of a society — the point is strongly insisted upon by the Committee — is to build up a reserve fund, not to furnish credit at the cheapest possible rates. The Indian societies are in a fortunate position in that there is usually a considerable margin between the rates at which they can borrow and the rates at which they can lend. Full advantage should be taken of this fact for as long a period as possible. The competition of societies has already compelled the village money-lenders to lower their rates, and in some cases this reduction has been so considerable as to compel the societies in their turn to lower the rates which they had established. The Government of India hold that so long as the rates charged by societies are below those charged by the outside market they cannot be regarded as excessive, even when they are high. The rates of interest charged on loans in the Punjab, the United Provinces and Bihar and Orissa are 15 per cent. or more, but these rates are lower — in most cases very much lower — than those charged by private lenders.

With regard to the repayment of loans there is no attempt upon the part of the Committee to conceal the fact that dangerous laxities and irregularities exist. The Committee of Management of a society have occasionally admitted that they take little trouble to recover the principal sum so long as the interest due upon it is paid regularly. In many cases the real amount of the loans which are overdue cannot be ascertained with any accuracy. There are often quite valid reasons why a member cannot repay a loan on the date at which it falls due, and the Committee of Management is in such cases fully justified in granting an extension ; and, a loan so extended is, quite properly, not classed as overdue. But it is very desirable to know what loans for which extensions have been granted have in fact become overdue; and this is seldom shown in the accounts. Further there have been revealed many cases of what are really fictitious repayments. A member repays a loan, and immediately takes out a new loan. The danger is obvious. A loan should be repaid out of the proceeds of its employment. Where a borrower nominally repays a loan and immediately contracts another he may actually have made his repayment, not out of his earnings or profits, but with money borrowed for the occasion from a money-lender and immediately repaid out of the proceeds of the second loan which he contracts with the society. In such cases there is no effective repayment, merely a paper adjustment of the loan, which the Committee characterises as " an insidious and dangerous irregularity. "

* * *

The proper size of the reserve fund and the proper method of employing it are matters which have given rise to a great deal of discussion in the Indian co-operative movement and upon which there is still considerable

diversity of opinion. The Act lays down that a registered society must put at least one-fourth of its net profits to a reserve fund and in the case of limited liability societies the reserve fund usually consists solely of this minimum. The Act also provides that in unlimited liability societies no division of profits shall be made without the sanction of the Local Government, which may also issue rules providing for the formation and maintenance of reserve funds and for the investment of any funds under the control of a society. In practice unlimited liability societies carry the whole of their profits to the reserve fund. For the whole of the agricultural societies in India the reserve fund is equal to 5.9 per cent. of the total liabilities, the percentage in the separate provinces varying from 3 per cent. in the Central Provinces to 13.3 per cent. in Assam and 15 per cent. in the small province of Coorg.

Generally speaking the reserve fund is regarded as intended to meet unforeseen losses and to serve as security for borrowings, but the fund is of special importance as being the only part of the working capital of which the society has the use free of interest. Obviously, therefore, if the society can utilise the reserve fund in making loans to members the business will be exceptionally profitable. In practice the reserve fund is invested in different ways, sometimes being invested in Government securities which are lodged with a Provincial Bank, sometimes being invested wholly or in part in outside securities and sometimes being employed, like other assets, in making loans to members. The Committee are of opinion that, all things considered, it is desirable that primary societies should use the fund in loans to members, provided that they can make arrangements with the Central Bank for such fluid resources as they need. Since the deposits from non-members in primary societies are small in amount, the necessity of providing fluid resources is not very great, while it is very desirable that the societies should build up as large a reserve fund as possible and the best means of achieving this is to invest their surplus assets in the most remunerative method open to them, namely, in making loans to their own members.

§ 3. Inspection and audit.

The Co-operative Societies Act prescribes that every society shall be audited at least once a year by the Registrar or some person authorised by him. In addition, provision is made for an " enquiry " or " inspection " to be made into the affairs of a society under special circumstances, but no arrangements are made for continuous supervision, nor is any legislative provision necessary. Before registering a new society the Registrar is expected to satisfy himself that the Committee of Management clearly recognises its responsibility and that the promoters intend to take an interest in the society after its formation. The Registrar is ultimately responsible, not merely for the carrying out of the compulsory audit and occasional inspections, but for the whole efficiency of the movement, and it is his duty,

therefore, to make such provision as is within his power for the continuous supervision and control of societies.

For the due carrying out of his duties the Registrar is usually provided with one or more joint or assistant Registrars. The Committee consider that the controlling staff needs to be considerably increased and suggest that ordinarily a minimum of one Registrar or Joint Registrar for each thousand societies is necessary. They suggest also that the charge of a Registrar or Joint Registrar should be regarded as equivalent to the charge of a District in importance.

The Act lays down that the regular audit shall include an examination of overdue debts and a valuation of assets and liabilities. The Committee think that the audit should extend beyond the bare requirements of the Act and that it should, for instance, be the duty of the auditor to notice any instance in which the Act, rules or byelaws have been infringed; to verify the cash balance and certify the correctness of the accounts; to ascertain that loans are made fairly, for proper periods and objects, and on good security; to examine repayments in order to check improper extensions; and generally to see that the society is working on sound lines and that the Committee, the officers, and the ordinary members understand their duties and responsibilities.

The Committee while insisting that the audit of societies shall remain always under Government control, does not consider it necessary that the entire auditing staff shall be Government servants. Co-operative institutions already employ a certain number of inspectors and auditors, and the best plan would be for original audits to be carried out by the staff maintained by co-operative institutions and for independent audits to be carried out at perhaps longer intervals by the Government staff.

HOLLAND.

THE CENTRAL BUREAU OF SOCIAL INTELLIGENCE.

SOURCES:

JAAARVERSLAGEN VAN DE VEREENIGING CENTRAAL BUREAU VOOR SOCIALE ADVIEZEN, II, IV, VII-XVI (1915) (*Annual Report of the Central Bureau of Social Intelligence for the years II, IV, VII to XVI* [1915]) : Amsterdam, 1901, 1903, 1906-1915.

CENTRAAL BUREAU VOOR SOCIALE ADVIEZEN (*Central Bureau of Social Intelligence*) : Organisation : Services. Amsterdam, 1910.

§ 1. THE ESTABLISHMENT OF THE BUREAU.

The " Central Bureau voor Sociale Adviezen " (*Central Bureau of Social Intelligence*) was founded by private initiative. In an article published in the " Sociaal Weekblad " (*Weekly Social Journal*) — issue of November 19th., 1898 — Dr. J. C. Eringaard, then holding an important position in the Netherland Yeast and Alcohol Factory (*Nederlandsche Gist- en Spiritusfabrick*) at Delft, the well known undertaking promoted by the late M. J. C. van Marken, who was always at the head of the social movement in Holland, alluded to the large number of cases " where working men, working-men's unions or employers' unions who were wishful of founding a mutual aid society or a co-operative distributive or productive society but did not feel themselves capable of drawing up the necessary schemes, sought to obtain information from competent persons, who were well-known for their experience and knowledge of the subject in question and who generally were very ready to give their assistance." " In order to obtain this expert advice," he wrote, " it is usually necessary to be in touch with these experienced persons who have the requisite knowledge ; unfortunately it is always possible that they cannot give really adequate assistance on account of want of time. To whom can one turn in this case ? "

In order to provide an answer to this last question, Dr. Eringaard suggested the foundation of a society having the greatest possible number of members, and with a paid secretary, who would do all the work in his power and obtain the assistance of experts where his own experience or knowledge was insufficient.

The members of the Bureau would have the right to gratuitous information, the Bureau being specially at the service of working-men's organisations, to which it would furnish information, gratuitously or for payment; it would also publish from time to time pamphlets, reports and social statistics.

At the end of his article, Dr. Eringaard asked all who approved of his idea to inform him of the fact in writing. About a hundred persons replied: encouraged by this success, Dr. Eringaard, together with M. J. C. van Marken and M. M. W. F. Treub, a Professor of the University of Amsterdam, called together a meeting of the persons interested, in order to discuss with them the realisation of the idea which he had originated. At the meeting, which was held on December 27th., 1898, at Utrecht, it was decided to found a Society with the following objects:

(*a*) To furnish information relating to institutions and regulations dealing with the interests of working men;

(*b*) To collect and tabulate data on this subject;

(*c*) To form a library.

A provisional committee was nominated; to this was entrusted the drawing up of draft rules. The society was to have its headquarters in Amsterdam.

The provisional committee published a circular (January 1899) setting forth the basis of the proposed society, insisting specially upon its political neutrality, and inviting the public to enrol themselves as members. This attempt was not, however, crowned with great success. During the month of April, 167 persons had become members and the total annual subscriptions amounted to 1,793 florins, while a sum of 970 florins had been offered to defray the preliminary expenses.

The provisional committee were of opinion that these relatively unsatisfactory results were chiefly due to the fact that they had omitted to publish an estimate of the expenses. A second circular was, therefore, published in April, again asking, and more insistently, that all persons interested in social questions should show their sympathy by becoming members of the new institution and informing them that, according to the budget drawn up by the committee, from 6,000 to 7,000 florins would be required to cover the annual expenditure.

The circular was also sent to those persons who were already members, and they were requested to try and form local propagandist committees. Thanks to these committees, the number of members rose in June to 338 while the annual subscriptions amounted to 2,871 florins and the donations to 1,327 florins.

The foundation of the society made a great advance, thanks to the *Maatschappij tot Nut van't Algemeen* (Society for the General Interest) which granted to it, at the suggestion of its Central Committee, the sum of 2,000 florins.

In the meantime, it seemed that many persons hesitated to become members before knowing who would be the Director of the Bureau.

The provisional committee, therefore, set to work to choose a Director.

This was not an easy matter, since the post to be offered was somewhat precarious. Prof. Treub then said that he was willing to give up some of his work and to place at the disposal of the Bureau the spare time thus obtained, if the committee could assure him the post of Director for at least three years, pay him a minimum salary of 2,000 florins annually and give him an employé to assist him in his work.

As a result of this proposal, the provisional committee appealed a third time to the public. This appeal met with success, the annual subscriptions in September rose to 5,000 florins, while donations to the value of 4,000 florins were given to defray the preliminary expenses. The provisional committee invited all the members to a meeting held at Amsterdam on September 11th., 1899, at which the rules were adopted in conformity with the draft. M. W. W. F. Treub, Doctor of law and Professor of political economy and of statistics at Amsterdam, was appointed Director. On October 1st., 1899, he entered upon his duties.

§ 2. Organisation of the Bureau.

(a) *Management.*

In conformity with Rule 10, the management is in the hands of a committee of 9 persons. The Director of the Bureau is at the same time the Secretary of the Committee. He has a right to speak, but not to vote. The General Meeting elects the members of the Committee on the nomination of two persons for each vacant place. In selecting persons for nomination an effort is made, as far as possible, to secure that representatives of the most important political parties shall become members of the Committee.

The Director is entrusted with the Administration of the Bureau. He is appointed for three years by the General Meeting and is immediately eligible for re-election. The Committee supervises the work of the Director, who, however, has much liberty of action and is very independent.

The information furnished, either by the Director himself, or by his assistant, for whose work he is responsible, circulates regularly among the members of the Committee, in order that they may have cognizance of it and, when necessary, make any remarks, thereby exercising their control.

An assistant, nominated by the Director with the consent of the Committee, works under his direction and responsibility. There is no exact division of labour between the Director and his assistant. With some exceptions, the information is generally supplied by whichever of the two has the most time to attend to the matter.

(b) *Information Given by Committees of Experts.*

All questions are answered in writing. In the case of very important communications, replies are not made to the enquires until they have been revised by a committee of experts, who inform the Director as to their views on the subject. The Director, as a result of their criticism, has often made somewhat important changes in the drafts written in the Bureau.

These committees of experts are nominated by the Bureau, which tries as far as possible to select experts of different professions. Their collaboration is gratuitous.

The drafts submitted for their opinion pass from one member to another, in such a manner that each expert has cognizance of the remarks of his colleagues. Only in very urgent cases does each member receive a separate copy of the memorandum.

Later, the Bureau communicates to the Committee the different remarks to which the draft has given rise.

The Director presides over all the committees, and decides with what questions they shall deal when the committees themselves express no special wishes. If there are questions that cannot be decided by correspondence, a meeting is called. This has, however, only occurred once and at the request of the Committee for Working-men's Associations which wished to define its position regarding a question that had arisen as the result of an application.

There are 7 Committees, dealing respectively with :

(1) Working-men's Associations.

(2) Institutions connected with Industrial and Commercial Undertakings.

(3) Co-operation.

(4) Workmen's Dwellings

(5) Credit Banks.

(6) Contracts of Working-men directly or indirectly employed in the service of the Public Authorities.

(7) Mutual Aid Societies.

(c) *Documentation.*

There is, in addition, a Documents Committee, the object of which is to collect, in order to prevent their loss, all the documents dealing with the history of Working-men's Associations in Holland. This Committee was, however, more important at first, when it was necessary to collect all that had been published in the past, while now it has only to keep the collection up to date. For this reason, the library undertakes this work to a constantly increasing extent.

The other committees are also regularly consulted, although their task has likewise decreased, now that they have drawn up replies to a number of important questions.

(d) *The Library.*

The Bureau possesses a library. The nucleus of this was formed by the Director, who made a loan of all the books and periodicals in his collection which might be useful to the Bureau. The Society for the General Interest followed his example by giving all the books that were more suitable to the Bureau library than to their own. The collection is constantly increasing, by donation as well as by purchase.

The publications of the Dutch Ministries and of the Ministries of foreign countries, and those of the different Labour Bureaux and of other official institutions are sent regularly to the library. It also receives any documents relating to the social work of the various towns and communes, the publications of Trade Unions, Employers' Organisations and other organisations.

The library contained at the end of 1909, 12,745 volumes ; it also possessed 788 reviews, or bulletins, and 20 newspapers. The collection is continually increasing, but there are no data on this subject. On several occasions, readers have stated that they have found in the library books that they have sought in vain everywhere else.

The number of books borrowed and of those consulted in the library itself is always growing larger.

(e) *Newspaper Cuttings.*

The section of newspaper cuttings forms an important part of the library. Almost immediately after the installation of the Bureau, cuttings began to be taken from different newspapers and periodicals, as well as from the reports and communications which were considered to be of importance. These extracts are all catalogued systematically and form a very valuable source of information for all persons wishing to make a special study of any social question.

The Bureau receives many newspapers gratis.

(f) *Monographs.*

In addition to affording information, the Bureau carries out the no less important work of publishing monographs on social questions. Unfortunately, since the resources at its disposal are small, the great cost of these publications does not permit of the Bureau devoting as much attention to this part of its programme as it would have liked to have done. The

monographs published have been written either by the staff of the Bureau or by persons who have kindly placed their time and talents at the disposal of the Bureau for this purpose.

The following are the titles of the publications of the Bureau:

Rapport over geschiedenis, inhoud en werking van bepalingen betreffende minimum-loon en maximum-arbeidsduur in bestekken voor bouwwerken, met drie supplementen (*Report on the History, Contents and Results of Regulations dealing with the Minimum Wage, and Maximum Working Day in the Conditions for Public Contracts for the Construction of Buildings, with three supplements*).

Catalogus der Documenten-Commissie (*Catalogue of the Documents' Committee*).

Klein-industrieen ten platten lande (*Small Rural Industries*).

Nitgifre van gemeentegronden in erfpacht (*Report on the Tenure of Communal Land in Emphyteusis*).

Catalogus der bibliotheek, 1e en 2e deel. (*Catalogue of the Library, Vols. I and II*).

Gezondheids- en Vacantiekoloniën in Nederland (*Holiday Colonies in Holland*).

Handleiding voor Woningbouwvereenigigen (*Manual for the Use of Building Societies*).

De Coöperatieve Verbruiksvereeniging (*The Co-operative Distributive Society*).

§ 3. Finances.

The resources of the Bureau consist of:

(*a*) A very small capital sum resulting from the various donation made to it at the time of its establishment, or since that date. This capital, however, is gradually decreasing on account of the annual deficits in the balance of the institution.

(*b*) The annual subscriptions of the members (1) tha tis to say, ordinary members, working-men's associations (including trade unions) other associations, and donors.

(1) The minimum subscription for ordinary members is 5 florins, which can be compounded for by a single payment of 100 florins; the annual subscription for working-men's associations and associations deemed by the Committee to be analogous is, in the case of associations with less than 100 members, 1 florin; when the associations have from 100 to 250 members, the subscription is 2.50 florins; those with from 500 to 1,000 members subscribe 10 florins, while associations containing over 1,000 members pay an annual subscription of 20 florins. This last subscription, which can be compounded for by a single payment of 500 florins, is the contribution paid by all the other members, with the exception of the donors, who subscribe 2.50 florins per annum. The members of trade associations may use the library on making an individual payment of 0.25 florin per annum.

(*c*) The Payments for Information. Information is not usually given gratis ; the charges made, however, are adapted to the means of the enquirers, and the Committee may even furnish information for nothing, which it does in the case of persons of small means. The principle of the Bureau is to never refuse information, even when the enquirers cannot pay an adequate sum.

(*d*) Grants. The State makes to the Bureau a grant of 3,500 florins per annum. Many towns also give it a grant varying from 10 to 500 florins.

This income does not, however, enable the Bureau to meet its expenses. It has always been in want of money, and this deficiency has had an effect upon all its work ; it cannot extend its operations, the library is badly housed and its organisation is hindered.

§ 4. Legal assistance for the indigent.

Since 1912, the Central Bureau of Social Intelligence has been associated with a new institution — the Bureau of Legal Assistance for the Indigent. This institution, which is supported by grants from the Municipality of Amsterdam and from the State, became at once popular. The Municipality makes it a grant of 4,750 florins and provides it with premises, heating and lighting, while the State gives it a subsidy of 200 florins. The institution has often had occasion to exchange opinions with similar bureaux in Denmark, Germany, Austria, Switzerland and the United States.

§ 5. The effect of the war.

The great War had no sooner broken out, than an important decrease was noticed in the number of applications for advice. The bureau drew up gratuitously for the municipalities a model scheme of regulations of which the Communes stood in great need, on account of the special unemployment legislation due to the War.

APPENDIX.

Table showing Information supplied since 1899, arranged under the most important heads.

	1899 to 1900	1900 to 1901	1901 to 1902	1902 to 1903	1903 to 1904	1904 to 1905	1905 to 1906	1906 to 1907	1907 to 1908	1908 to 1909	1909 to 1910	1910 to 1911	1911 to 1912	1912 to 1913	1913 to 1914	1914 to 1915
Information was furnished on:																
Savings and Credit Banks	4	2	2	1	2	2	—	1	1	—	—	1	—	—	—	—
Co-operation	15	24	15	19	13	4	7	8	2	2	5	4	4	2	2	1
Pension funds, Sick Benefit and Burial Insurance Societies	16	31	21	15	12	17	10	4	12	10	11	14	16	14	9	4
Trade Unions and Workers' Associations	14	14	18	28	13	8	20	21	22	11	13	8	17	20	21	11
Cheap Dwellings	10	16	8	17	7	6	7	5	2	5	11	6	17	13	17	8
Labour Contracts and Regulations in Industrial Undertakings	2	—	1	7	2	2	1	2	17	21	5	7	1	1	1	1
Measures against Unemployment	—	2	—	2	4	4	—	3	3	2	7	—	1	—	—	—
Minimum Wage and Maximum Working Day in the Conditions for Public Contracts	—	4	1	1	—	2	1	—	—	2	3	—	—	—	1	1
Regulations for Municipal Workers	—	—	—	—	1	—	2	—	—	2	—	2	1	1	—	2
Petitions	—	—	—	—	—	—	1	6	4	6	3	2	3	1	—	—
Various	4	17	16	7	18	6	18	11	4	13	—	—	—	—	3	1
Information was requested by:																
Workers' Associations and other Associations	58	76	53	72	50	32	35	52	41	31	30	36	52	45	44	24
Heads of Industrial Undertakings	6	14	11	11	5	4	12	2	15	25	6	10	5	3	2	2
Private Individuals	21	15	17	11	12	12	17	5	6	9	11	3	7	6	3	4
Communes	—	5	1	3	3	3	3	—	1	1	2	3	6	3	2	—
Foreign Governments	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—
Chambers of Labour	—	—	—	—	—	—	—	1	—	1	—	—	—	1	—	—
Foreign Social Institutions	—	—	—	—	—	—	—	1	3	3	2	2	3	—	2	—
Employers' Associations	—	—	—	—	—	—	—	—	1	1	4	—	—	—	—	—
Insurance Societies	—	—	—	—	—	—	—	—	—	1	2	2	—	—	—	—
Ministry	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—

MISCELLANEOUS INFORMATION RELATING TO CO-OPERATION AND ASSOCIATION IN VARIOUS COUNTRIES.

GERMANY.

THE MILK INDUSTRY AND CO-OPERATIVE DAIRIES IN POMERANIA IN 1913. — *Molkerei Zeitung*, Berlin, January 2nd., 1915.

All the reports concerning the milk industry in 1913 agree in showing that owing to the good condition of the pasturage and the abundance of the fodder-crops, the quantity of milk delivered at the dairies in almost all parts of Germany was above that of the two preceding years. The general scarcity of milk in 1911 was due to the extreme dryness of the year as well as to the prevalence of foot and mouth disease and the consequences were seriously felt in 1912. As a result the price of milk and of the produce derived from milk rose considerably. The abundant supply of 1913, following upon such conditions, brought back prices towards their former level. The insecurity of the political situation, too, as well as the general economic depression, have had an unfavourable effect on the market.

Whilst in 1912 the average price of butter amounted, according to the official quotations in Berlin to 133.37 pfg., the average price in 1913 fell to 126.85 pfg. The difference of 6.52 pfg per lb. of butter is equivalent to a difference of ½ pfg. per kg. in the value of the milk. The situation of cheese was also unsatisfactory.

Although the milk supply of 1913 was decidedly superior to that of the two preceding years, the statistics of 1913 show no falling off in the imports. As to cheese the imports rose from 214,446 quintals in 1912 to 262,646 quintals in 1913. The imports of butter diminished slightly, from 555,530 quintals to 542,394 quintals. The imports of cream, on the other hand, increased, rising from 419,495 quintals to 443,745 quintals in 1913.

We may estimate the milk production of Germany in 1913 at 27,000,000,000 kg. The third part of this amount was probably transformed into butter and cheese in the butter and cheese factories.

We have said that the milk supply of Germany in 1913 was appreciably greater than it had been in the two previous years. This statement, however, must be taken in a general sense, for, in reality, there are many exceptions. For instance, in the province of Pomerania, the co-operative

dairies on the Baltic coast (Districts of Köslin, Schlawe, Stolp and Lauenburg) made relatively less butter and cheese than in 1912. The reason for this is not far to seek. In the months of May and June drought constantly prevailed, with hard frosts at night which were very prejudicial to meadows and pastures and to the clover fields. The first cutting of grass and clover was very poor; in July, persistent rains set in and only a part of the hay crop could be saved in good condition. The want of pasturage in spring, the insufficiency of green fodder in summer, and in winter of good clover hay and dry fodder from the permanent pasture had a very unfavourable effect on the milk production. Many herds, too, were affected by disease.

During the year the number of dairies, co-operative and otherwise, increased by thirteen.

Of every 1000 cows in Pomerania 407 belong to members of co-operative dairies, of which there are 224. Besides these there are still 162 private dairies and 69 belonging to estates making a total of 456 dairies in Pomerania.

Of the 224 co-operative dairies, 210 were in full work in 1913; the others were but recently founded and the buildings were not quite finished. The milk made into butter, cheese, etc., in these 210 co-operative dairies in 1913 amounted to about 375,000,000 kg. of which 250,000,000 came from 130 co-operative dairies belonging to the Dairy Federation of the Province of Pomerania. The quantity of the milk that annually passes through the 164 private dairies and the 6 estate dairies may be estimated at 100,000,000 kg. Thus every year about 475,000,000 kg. of milk are utilised in the dairies of Pomerania.

The greater part of the Pomeranian butter goes to Berlin, a small quantity to Upper Silesia and Saxony. Many dairies also have an important retail trade partly carried on through the post.

The Federation of North German Dairies (*Verkaufsverband Norddeutscher Molkereien in Berlin*) contained, at the end of 1913, 77 affiliated societies, holding 730 shares. The total business done by this Federation in the year amounted to 15,720,852 marks, of which 11,280,589 marks was wholesale business and 4,430,263 marks retail business. In the system of classification 0.03 % of the butter belonged to class " ef " (extra fine), 42.25 % to class " FF " (superfine), 48.50 % to to class " f " (fine), 8,50% to class " z " (2nd. quality), 0.70 % to class " a " (medium quality) and 0.20 % to class " VI " (inferior quality). The prices obtained during the year were on an average 130 ⅓ pfg. for superfine butter, and 129 ⅓ for fine, against 124 ¾ to 126 ¾ for the first class according to the Berlin quotations. The Federation after allowing large sums for depreciation, realised a net profit of 17,346.73 marks for the year. The capital is at present 565,400 marks.

Of the 145 co-operative dairies affiliated to the Dairy Federation of Pomerania, 126 published reports for 1913. They delivered 194,862,813 kg. of milk and 6,085,215 kg. of cream corresponding to 38,249,861 kg. of milk, making an average of 1,850 000 kg. of milk per dairy, and a daily average of 5,068 kg. (4,955 in the preceding year).

Four of these co-operative dairies receive more than 5 million kg. of milk, six receive between 4 and 5 millions, 10 between 3 and 4 millions, 24 between 2 and 3 millions, 39 from one to 2 millions, 15 from $^3/_4$ of a million to one million, 21 from $^1/_2$ to $^3/_4$ of a million, 6 from $^1/_4$ to $^1/_2$ million and one less than 250,000.

The average percentage of butter-fat, according to the yield of butter, was 2.91 to 3 % in 5 dairies; 3.01 to 3.10 % in 17; 3.11 to 3.20 in 37; 3.21 to 3.30 % in 31; 3.31 to 3.40 % in 27; 3.41 to 3.50 % in six; 3.51 to 3.60 % in two; and 3.61 to 3.70 % in another.

Whole milk to the quantity of 12,498,820 kg. valued at 1,875,030 marks was disposed of by sale; 2,672,155 kg. worth 327,651.30 marks, was made into cheese, 116,120 kg. (11,971.15 marks) were consumed by the working staff and the remainder, 179,575,718 kg. was skimmed. 233.006 kg. of cream were sold for 283,573.41 marks and 13,393 kg. of the value of 16,204.37 marks were delivered to the members of the societies. Thus there was a total of 246,399 kg. of the value of 299,777.78 marks.

The remainder of the cream produced 15,174,243 lbs. of butter, to which may be added 19,437 lbs. purchased.

The butter was disposed of thus:

	Lbs.	Value in Marks.
Sold wholesale	9,716,234	12,112,177.85
„ retail	3,166,914	4,365,387.54
Consigned to milk suppliers	2,211,844	2,808,408.89
„ „ employés	30,754	36,034.03
Balance	79,422	93,265.67
Total	15,205,168	19,415,273.98

Wholesale prices varied from 117.51 to 133.81 marks; the average being 124.66 marks. The general average — wholesale and retail — ranged from 120.09 to 136.70 marks, giving an average of 127.69 marks per 50 kgs. at the dairy.

Of skimmed milk and buttermilk 6,446,654 kg. were sold, to the value of 283,446.83 marks. 7,635,295 kg. of skimmed milk of the value of 235,384.90 marks were used for the making of minor produce such as cheese, caseine, etc. The surplus produce of these kinds was handed back to the milk-suppliers. If we count these residues as well as the quantity of skimmed milk according to the amount of cream delivered (85 %) at 3 pfg., these 192,547,213 kg. give a sum of 5,770,253.22 marks. Taken altogether the receipts amounted to 28,118,790.06 marks for 232.642.825 kg. that is 12.13 pfg. per kg. of milk.

Taking account of every surplus, the net value of the milk comes to 11.02 pfg. per kg. or 11.35 pfg. per litre of milk containing 3.12 % of butter-fat.

The receipts to meet expenditure, and depreciation and to yield a profit are:

1. Subsidy to cover expenses (*Kostenpfennigbeitrag*)	2,247,975.39	marks
2. Other receipts	644,333.34	„
Total	2,892,307.73	marks

These have been divided as follows:

1. Working expenses	704,560.18	marks
2. Expenses of management	1,117,127.79	„
3. Manufacture and despatch of butter	325,364.35	„
4. Dairy products to employés	47,019.55	„
5. Various	15,227.29	„
Total	2,209,299.16	marks

This gives an average of 94.97 pfg. per 100 kg of milk (1921: 95.36 pfg.). 123 dairies ended the year with a profit of 695,832.56 marks, while in three dairies the expenses (*Kostenpfennig*) were not covered by the sum granted for the purpose.

GREAT BRITAIN AND IRELAND.

THE IRISH AGRICULTURAL WHOLESALE SOCIETY. — *Irish Homestead*, No. 8, February 19th., 1916.

The balance sheet for 1915 of this Society (the trading federation of the Irish agricultural co-operative societies) shows that a remarkable increase in its business took place in that year. Its sales amounted to £375,379 in 1915 as compared with £268,384 in 1914. The net profit in 1915 was £3,343. This will be distributed as follows: 5 per cent. interest on ordinary shares, £250; 5 per cent. interest on preference shares, £350; to reserve fund, £1,000; to excess profits reserve (that is, to provide for the war taxation on war profits), £1,000; to writing off rolling stock, £110; to extensions account, £500, carrying forward to next accounts £133.

To cope with the expansion of its trade in the South of Ireland, the Irish Agricultural Wholesale Society has established a new depôt at Limerick, which was formally opened on February 9th. At this depôt will be stocked agricultural machinery, creamery requisites, seeds, feeding-stuffs, etc., while provision will be made for the marketing of eggs and poultry.

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THE CO-OPERATIVE SUPPLY OF FRUIT AND VEGETABLES TO AN ARMY DIVISION. — *Co-operative News*, No. 7, February 12th., 1916. — Unpublished memoranda and correspondence forwarded to the Internationl Institute of Agriculture by the Agricultural Organisation Society.

An interesting and successful experiment has been made by the Agricultural Organisation Society in organising the supply of fruit and vegetables to an Army Division. By official request the Agricultural Organisation Society sent its Fruit and Market Produce Expert in October to study the conditions under which fruit and vegetables were being obtained by the various units of a Division stationed at Bedford, and to make suggestions for their improvement by collective action.

The expert found complete want of uniformity in the quality and price of the produce and entire absence of any co-operation between any two units in the purchasing of the necessary supplies. In one store he saw potatoes which had been purchased at 70*s.* per ton and at the very next store potatoes of the same variety, but of inferior quality, which had been purchased at 90*s.* per ton. He saw some cabbage of very poor quality which had cost 10*d.* per dozen ; at another store, he saw cabbage that had cost 5*d.* per dozen, and one cabbage of this lot would have weighed at least as much as twelve of the more expensive lot. The price of carrots varied from 3*s.* to 5*s.* per cwt ; turnips, 1*s.* 6*d.* to 4*s.* 8*d.* per cwt., and English onions, 9*s.* 4*d.* to 14*s.* per cwt. The samples of carrots, turnips and onions which he inspected would not have found a ready sale on the London markets and the average prices were in excess of London prices.

At the suggestion of the expert, a scheme of collective action was adopted. A store and office were acquired at Bedford, near the Midland Railway Goods Station, where supplies are received for issuing to the units on each Friday, the principal issuing day.

The staff regularly employed consists of the Purchasing Department Officer, an issuer and a clerk. Occasionally it has been found necessary to make use of a fatigue party consisting of one non-commissioned officer and three men.

Each unit sends an indent every Friday for the supplies required to be drawn on the following Friday. The indents are tabulated, so that the Department knows at once the bulked requirements of the various units.

Each Friday morning information is received from the growers as to the quantities of produce they are in a position to supply, with the prices thereof. The Purchasing Department is thus in a position to know the supplies available and, if the prices are satisfactory, to place orders accordingly.

Invoices are made out from the indents and then handed to the issuer who hands out, from the store or the station yard as the case may be, the produce marked thereon and obtains a receipt on the counterfoil, which furnishes a check on all issues.

Each unit is responsible for its own transport arrangements, and the plan works very smoothly. Unit transport draw their supplies daily from the station yard and pick up supplies of vegetables from the Department's store as part of their morning's work.

Invoices are sent with each delivery of produce and a statement of accounts is made up to the last Friday of each month, so as to allow Quartermasters to make up their books in accordance with the Army Regulations and payment is made by them almost immediately.

Suppliers of produce receive payment either on delivery of goods or weekly or monthly as desired.

The sources of supply are the local growers in the immediate neighbourhood of Bedford, and associations of small holders and others. For the week ending January 7th., at least 80 % of the produce issued came from local growers. The agricultural co-operative societies within 50 miles of Bedford have, however, been actively canvassed to induce them to take advantage of the scheme.

The following statement shows the quantities and classes of produce issued from the time the scheme came into operation up to January 7th., together with prices at which supplies were issued and the average of the price previously paid :

Classes of Produce.	Prices.	Quantities	Prices operating the week before the scheme came Into operation.
Potatoes	£4 15s. per ton.	103 tons.	£5 10s. per ton.
Cabbage	10d. » doz.	1039 doz.	1s. & 1s. 3d. per doz.
Savoys	1s. » »	143 »	1s. 6d. » »
Onions, Spanish	12s. » case.	24 cases.	13s. & 20s. per case
» English	12s. 6d. » cwt.	4 tons 6 cwt.	17s. per cwt.
Carrots	3s. » »	12 » 5 »	5s. » »
Turnips	2s. » »	7 » 4 »	5s. » »
Swedes	2s. » »	4 » 1 »	4s. » »
Sprouts	14s. » »	11 »	17s. to 20s. per cwt.
Peas	32s. » »	1 » 3 »	37s. » »
Parsnips	3s. 3d. » »	1 » 6 »	4s. 6d. » »
Haricot Beans	27s. » »	1 » 3 »	32s. » »
Bananas	16s. » »	11,000	18s. per cwt.
Celery	1s. 3d. » doz.	232 doz.	2s. » doz.
Apples	13s. 9d. » cwt.	14 cwt.	16s. » cwt.
Cauliflowers	1s. » doz.	45 doz.	2s. » doz.
Tinned Tomatoes	6s. 6d. » »	98 tins.	7s. » »
Pineapple chunks	4s. 6d. » »	77 »	5s. » »

This statement indicates the savings that are being effected.

The actual cost price of produce is charged to the units plus 2 ½ per cent. to cover management and other expenses. The latter has been found more than ample for all expenses so far incurred.

The net savings to the units participating in the scheme are very large. These savings go direct to the units and have enabled the Quartermasters to spend more money on luxuries, etc., which the troops might not otherwise have received.

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WOMEN'S INSTITUTES. — "Women's Institutes of Canada" and "Planning Work and Programmes for Women's Institutes" (Leaflets issued by the Agricultural Organisation Society).

The Agricultural Organisation Society has recently taken up, as a new branch of its work, the organisation of Women's Institutes of the type which have been so successful in Canada. The primary object of these Institutes is the holding of meetings at which subjects in connection with the home are discussed. The principal heads under which these subjects group themselves are shelter, food, clothing and welfare of child and adult. Speakers and demonstrators will be secured in various ways. The members of the Institute will be encouraged to share their knowledge or experience with their neighbours, and local talent will be used as freely as the circumstances permit. Educational, agricultural and similar bodies will also be asked to send speakers. The Agricultural Organisation Society itself will help Institutes in every possible way with speakers, literature, expert advice, etc.

It is hoped that, following upon the meetings, various forms of combined effort for social improvement will be undertaken.

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A SUCCESSFUL SOCIETY FOR THE CULTIVATION OF VACANT LANDS. — HUDSON (E. L.): The Croydon Vacant Lands Cultivation Society. *Journal of the Board of Agriculture*, No. 10, February 1916.

In Croydon, a town of 181,000 inhabitants, 10 miles from the centre of London, a successful society for the cultivation of vacant lands was formed soon after the outbreak of the war. A local landowner offered to lend his vacant plots for cultivation, free of rent, to any applicants, and promised to compensate cultivators for loss of crops should he desire to take over his land again at short notice. Although the soil was only fair, and the land in some parts extremely rough, about 20 applications were received.

It was then decided to form a society, and a Committee was elected at a meeting held on September 23rd., 1914. Another landowner offered his

vacant land, and others were approached by members of the Committee, with the result that in December, 1915, the Society had control of about 20 acres, lent by 22 different owners, and let in small plots of 12 rods or less to over 260 cultivators.

Amongst the landowners who have allowed the use of their vacant land is the Croydon Corporation, who have further remitted rates, afforded privileges in the use of water, and helped the Society in various other ways.

The plot-holders become members of the Society, paying a minimum subscription of 4s a year. This amount is ear-marked for a "compensation fund," a provision against the possible necessity of having to pay compensation to the cultivators under the various acts governing small holdings and allotments. The cultivator signs an undertaking to give up his land on demand. The agreements with the landowners are signed by the Committee, and in most case the Committee undertakes to vacate the land after 4 days' written notice.

For its working expenses the Society is almost entirely dependent upon the subscriptions of members other than plot-holders, and local sympathisers have been asked to contribute. Owing to the number of unpaid services rendered, the expenses in 15 months did not reach the sum of £9.

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THE ROYAL ULSTER AGRICULTURAL SOCIETY. — *Farmers' Gazette*, No. 10, March 4th., 1916.

The annual general meeting of the Royal Ulster Agricultural Society was held on March 23rd. The annual report stated that the Society's show ground at Balmoral (Belfast) had been taken by the military authorities and that, with the exception of the annual show and sale, the work directed from that centre had been brought almost to a standstill. The Society had 1,090 members at the end of 1915. The Large White Ulster Pig Herd Book, of which the fifth volume had been issued by the Society in 1915, contained entries of 216 boars and 190 sows. The financial statement showed receipts £1,963 and expenditure £2,360.

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THE BRITISH HOLSTEIN-FRIESIAN CATTLE SOCIETY. — *Farmers' Gazette*, No. 8, February 19th., 1916.

The sixth annual general meeting of this society was held on February 10th. The Council's Report showed that there had been a net gain of 66 members during 1915. An encouraging start had been made with the checking and recording of milk yields in the herds of members. It would soon

be possible to organise an annual show and sale of registered bulls, which should do much to popularise the Holstein-Friesian breed. The receipts for the year amounted to £908 (in addition to £251 as interest on investments) and the expenditure to £636.

ITALY.

THE "AGRICULTURAL WEEK" OF ROME.

The Italian Farmers' Society (*Società degli Agricoltori Italiani*), which has as its primary object the promotion of the progress of agriculture and the betterment of the rural classes and now contains 3,000 members, holds every year in Rome a series of meetings of agriculturists to discuss the most urgent questions of technical agriculture and agricultural economy and to express opinions and make recommendations on these subjects. This year the meetings were held during the first ten days of March, and were entirely devoted to the consideration of agricultural problems which might arise in Italy after the war (1).

The first subject discussed was Italian emigration after the war. Prof. Sitta proposed a resolution in which after setting forth the nature of the problem it was urged that from now on, taking due account of the proposals and schemes for land improvement, irrigation, and home colonisation put forward in view of the needs which will arise after the war and with the object of increasing the agricultural and industrial production of Italy, efforts should be made, by a wise co-ordination of all the productive power of the country, to enable considerable numbers of the labouring population who returned to their native land at the beginnnig of the war, to remain when it is over, and find employment at home.

Signorina Scanni then spoke on behalf of the Women's Section of the Society, showing how extensively women had emigrated before the war, both to other parts of Europe, and across the ocean, and pointing out the relation of this emigration to the agricultural question. She referred to the various currents of emigration, and to the work done by women in industry and agriculture, and to the wages and hours of work. She pointed out the importance of the women's contingent of labour in internal migration, and of the moral influence exercised by women in respect to the migration of the men.

(1) As usual the proceedings began with a general meeting of the members, at which the president of the society gave an account of its work in 1915. In that year its whole time was devoted to new questions arising out of the war and relating to cereal growing, cattle raising, exportation and importation, railway carriage of agricultural produce, coal, the prices of sulphate of copper and of superphosphate, labour, land tenure, etc. See the interesting "Relazione del Presidente della Società degli Agricoltori Italiani per l'anno 1915" (*Report of the President of the Italian Farmers' Society for* 1915), Rome, Tipografia dell'Unione Editrice, 1916.

Sig. E. Morandi, engineer, who acts as director of the Italian Federation of Agricultural Consortiums, then read his report on the subject of *Manual Labour and Agricultural Machinery*. He showed the importance of machines in the principal farming operations (mowing, reaping, ploughing) and endeavoured to establish, by means of statistics, the necessity of manual labour, and the extent to which it is and may be replaced by mechanical appliances. Then a resolution was passed calling upon the government to promote the use of agricultural machinery and to encourage the various forms of collective use of machines.

Prof. Giovanni Raineri then spoke on the subject of *Land Improvement and Irrigation*, showing the intimate connection at the present time between these two questions, both with regard to their chief aim, the increase of agricultural production, and to the method to be followed for its attainment, viz. the action of the State judiciously combined with private initiative. He pointed out the great difference in the condition of agriculture between the North and the South of Italy, and the greater necessity for State-aid in the South. He expressed the opinion that, cases and conditions of land improvement differing widely, it was necessary to study each scheme separately so as to ascertain what technical and economic measures would best attain the desired object.

With regard to irrigation Prof. Raineri observed that an excellent opportunity for its encouragement was now presented through the eagerness with which private industry is endeavouring to utilise water-power by collecting water in mountain reservoirs.

Next came the speeches of Dr. B. Moreschi, Director-general of Agriculture, on the *Live-stock question*, and of Prof. Tito Poggi on *New or forgotten forms of agricultural cultivation and production*,.

Lastly, Dr. G. Pollastrelli spoke on the important subject of *Small Holdings*. He again affirmed the economic and social necessity of protecting small agricultural holdings in Italy and increasing their number; he hoped that the government would at once undertake the complicated work required to consolidate the small holdings already existing, to ensure their prosperity and to form others. He called upon those deputies who approve of small holdings to continue more energetically the work already begun for this object.

The Italian Farmers' Congress was followed by the *Congress of Itinerant Agricultural Lecturers* devoted to the *Agricultural questions of the present time*. In this congress, a resolution was passed by a large majority calling for :

" A census of all the temporary agricultural labour available ; its engagement and utilisation by means of exchanges which could also organise internal migration; reduced railway fares and adequate means of transport ; contracts and other measures for the protection of the labourer, such as to interest him and give him pleasure in his work, with clauses guaranteeing to the employer the quiet and regular continuance of field work, and providing for the settlement of disputes that may arise;

" Vigorous support to co-operation and mutual aid, so that particularly

in farming operations there may be mutual aid, and the use in common of implements and machines ;

" Agricultural credit, grants and loans in kind, to be made readily accessible to all farmers in Italy, giving full consideration to the institutions already working in a praiseworthy manner for this object throughout Italy ;

" Steps to be taken to insure the importation of machines and implements required in agriculture and to stimulate their manufacture in Italy ;

" Such means of transport by sea and by rail as will secure when necessary the supply of agricultural requirements and the subsequent distribution of the crops or produce derived from them, giving precedence in turn to that which is most urgent or cannot be delayed ;

" In the event that the interests of agriculture and of the country require it, and without interfering with honest trade, requisitions of and fixed prices for those agricultural requirements the high price and the exchange of which might cause serious disturbance in the agricultural world and a consequent neglect of cultivation and other important operations. "

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CO-OPERATIVE SOCIETIES LEGALLY CONSTITUTED ON JUNE 30th., 1913. — "Annuario Statistico Italiano", Second Series, Vol IV, year 1914. Ministry of Agriculture, Industry and Commerce, General Direction of Statistics and Labour, Rome 1915.

From the Statistical Year-Book lately published by direction of the Ministry of Agriculture, Industry and Commerce are taken the following data respecting co-operative societies legally constituted on June 30th., 1915, exclusive of those of which the principal business is credit. These figures show that in Italy there were at that date 7,996 societies, as compared with 7,429 on June 30th. 1914. They are thus classified :

I. *Co-operative distributive societies*		2,283
II. *Co-operative insurance societies*		170
III. *Agricultural and vine-growing societies*:		
1. Agricultural industries and special crops . . .	1,017	
2. Vine-growing and wine-making	129	
3. Silk-worm raising, beekeeping	12	
4. Dairies and cheese factories	159	
		1,317
IV. *Co-operative societies for the manufacture of foodstuffs* :		
1. Bakeries, mills, and macaroni factories . . .	83	
2. Slaughter-houses and various industries . . .	48	
		131
V. *Co-operative fishing societies*		106

VI. *Co-operative industrial productive societies:*		
1. Clothing, weaving and kindred industries	90	
2. Wood and leather industries	150	
3. Machinery and metal-working	172	
4. Chemical and pharmaceutical	57	
5. Decorative arts and ornamental goods	114	
6. Electric works	84	
7. Printing and kindred industries	125	
8. Sanitary works, etc.	40	
9. Pottery and glass works, building	40	
10. Various industries	17	
		889
VII. *Co-operative building societies*		690
VIII. *Labour co-operative societies:*		
1. Masons, stone-cutters, plasterers	905	
2. Labourers, quarrymen	694	
3. Carters	186	
4. Dock-labourers, porters	210	
5. Various	91	
		2,086
IX. *Various co-operatives societies*		324
Total		7,996

The geographical distribution of these societies is as follows:

Emilia	1,809	Campania	273
Lombardy	1,458	The Marches	249
Tuscany	823	Umbria	138
Venetia	706	Calabria	113
Piedmont	628	Abruzzi	84
Latium	449	Sardinia	57
Sicily	423	Basilicata	35
Liguria	392	Eritrea	2
Apulia	307		

Agricultural and wine-growing co-operative societies on June 30th, 1914, numbered 1,242, and on June 30th., 1915, there were, as stated 1,317, an increase of 75.

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STEPS RECENTLY TAKEN BY THE ITALIAN FEDERATION OF CATHOLIC RURAL BANKS. — *Cooperazione Popolare*, the organ of the Italian Federation of Rural Banks, Parma, Nos. 2 and 3, January 31st. and February 15th., 1915.

Among the work undertaken by this Federation (1) in 1915, that which is most deserving of notice is its effort to unite the existing rural and popular banks in legally constituted diocesan and provincial federations. There are already many of these federations, some in a flourishing condition. But many are not legally recognised, and are thus prevented from carrying on business of any kind, being obliged to confine themselves to purely moral functions. The Italian Federation recently proposed that henceforth there should be two species of legally constituted local federation, the one for inspection and with functions merely technical, the other with the functions of a Central bank. The Federation itself has, accordingly, compiled two sets of model rules, the one, already described in the *Bulletin of Economic and Social Intelligence* of last December (page 39) for those federations which do not intend to exercise the functions of a central bank, the other for those assuming such functions. These last will have the legal form of co-operative limited liability societies for the following purposes:

(*a*) To act as central credit institutions for the rural share banks;

(*b*) To establish for the benefit of such banks special services of supervision and of guidance in regard to management, legal matters and book-keeping, to be given chiefly by means of inspections;

(*c*) To promote the establishment of new popular credit societies and co-operative societies;

(*d*) To assist the share-banks in collective purchase or in the various technical, fiscal, legal or economic questions;

(*e*) To extend agricultural credit by means of the share banks.

The capital will be composed of the share-capital, consisting of shares of 100 lire each, and of the reserve fund. The popular rural and workmen's banks may become members of the federations, as well as co-operatives societies and other trading bodies legally constituted, and private persons.

(1) On December 31st., 1915, twenty local federations of rural banks, and more than one-third of the whole number of rural Catholic banks in Italy (about 2000 according to recent statistics) were affiliated to this National Federation. The chief local federations are those of Bologna, Bergamo, Cosenza, Faenza, Ferrara, Florence, Forlì, Milan, Parma, Rome, etc. The Federation of Rural and Popular Banks of the Province of Bologna, one of the best organised, on October 31st,, 1915, contained 86 affiliated banks with 7,541 members. Their aggregate financial position at that date is shown by the following figures: Assets: Loans to members (bills), 1,810,060 lire; securities, 780,682 lire; deposits on current account, 982,745 lire; goods, 221,746 lire; interest due and expenses of 10 months' working, 110,691 lire. Liabilities: Deposits, 3,455,818 lire; current accounts, 57,676 lire; sundry creditors, 42,771 lire; capital, 147,315 lire; interest and profits of 10 months' working, 130,254 lire. See on this subject *Cooperazione Popolare*, Parma, No. 20, December 20th., 1915.

Having become members, the said bodies must submit to inspection, and conform to all the decisions taken in regard to them by the Council of Management. This council will be composed of seven members, and will have most extensive powers as regards the ordinary and extraordinary administration of the society.

Already some local federations, among them those of Faenza, Bologna, Pistoia, Mantua, Reggio Calabria, are endeavouring to obtain legal recognition in conformity with the scheme which we have described.

Another step recently taken by the Italian Federation is the establishment of a permanent Secretarial Bureau to attend to and foster the relations with the affiliated federations, to promote the formation of new federations, to collect materials for the study of legislative reforms relating to co-operative credit, to compile statistics, and, generally, to follow the course of the small credit movement in Italy.

Lastly at the beginning of 1916 the Federation published a "List of Rural Banks and other Small Co-operative Credit Societies (Catholic) existing in 1915," from which it appears that there are now in Italy 2,002 of such soieties, distributed as follows:

Northern Italy		Southern Italy	
Venetia	436	Campania	76
Emilia	336	Calabria	54
Lombardy	236	Abruzzi and Molise	39
Piedmont	188	Apulia	30
Liguria	16	Basilicata	7
Total	1,212	Total	206

Central Italy		The Islands	
Tuscany	123	Sicily	240
Marches	98	Sardinia	9
Latium	89		
Umbria	25		
Total	335	Total	249

In the report which accompanies the "List of Rural Banks" it is stated that in many places "the robust stem of the rural bank has thrown out many branches for the service of the members," in the form of various functions auxiliary to credit, or of co-operative societies and independent bodies: from the collective purchase of manures, seeds, implements, and the use in common of agricultural machines, to unions of agricultural co-operative societies, collective farms, co-operative dairies, co-operative wine-societies, distributive societies, and mutual agricultural insurance societies.

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RESTRICTIONS ON DIVIDENDS OF COMMERCIAL COMPANIES. — *Gazzetta Ufficiale del Regno d'Italia*, Rome, No. 41, February 19th., 1916.

A Vice-regal Decree of the February 7th., 1916 (No. 123) " considering the necessity of safe-guarding the future of commercial companies during the present exceptional conditions, and of increasing their capital " directs that from the close of the balance sheet for 1915 until further orders, no commercial company of any description, whether commercial share company, mutual association, co-operative society or any other trading body, shall distribute to its members dividends out of its profits exceeding 8 % of the paid-up capital. The greater part of the profit realised in one year's working, not distributed by reason of this decree, shall be set apart for a special reserve and shall be exempt from the tax on movable property.

This decree, therefore, is also applicable to co-operative societies, but it must be observed that it will seldom affect them, as they rarely pay a dividend above 8 %.

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APPOINTMENT OF A TECHNICAL COMMITTEE FOR AGRICULTURE. — *Gazzetta Ufficiale del Regno d'Italia*, Nos. 34 and 51, February 11th. and March 2nd., 1916.

By a Vice-regal Decree of December 31st., 1915, a " Technical Committee, " composed of persons conversant with agricultural economy and technical agriculture, has been formed for the duration of the War. It will exercise the functions assigned to the " Superior Council of Agriculture, " by laws, decrees and regulations, and will give its opinion on the provisions of an agricultural character. The Directors-general of Agriculture, of Forests, and of Credit and Thrift, will be *ex-officio* members.

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WORK OF THE ITALIAN FEDERATION OF AGRICULTURAL CONSORTIUMS IN 1915. — Report on the work of the Federation in 1915 presented to the Annual Meeting of Members held on February 20th., 1916. Piacenza, 1916.

In 1915 this Federation, the most powerful co-operative organisation in Italy with regard to the purchase and sale of agricultural requirements, sold goods to the amount of 19,240,443 lire, being an increase of 3 ½ million lire over the sales of 1914. In the above figures nitrate of soda, sulphate of copper and agricultural machines represent about 17,000,000 lire.

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THE DEVELOPMENT OF THE ITALIAN BEE-KEEPERS' FEDERATION — Report on the Work of the Association in 1914. Ancona, 1915.

The Italian Bee-keepers' Federation with head-quarters at Ancona is a co-operative limited liability society with unlimited capital, for the purpose of producing and selling wax and honey. Since its modest beginning in 1904 it has steadily increased, as will be seen by the following table. It is now the most important society of beekeepers in Italy.

Development of the Federation from 1904 *to* 1914.

Year	Capital	Number of members	Business done (in-comings and out-goings)	Exports	Total sales	Price per quintal packing included
	Lire		Lire	Quintals	Quintals	Lire
1904 . .	1,314	72	2,087	—	—	—
1905 . .	9,236	456	419,226	175	757	76
1906 . .	10,342	534	1,392,060	385	1,606	68
1907 . .	11,246	600	1,640,864	625	1,453	77
1908 . .	22,798	607	1,995,906	605	2,032	76
1909 . .	31,097	629	2,237,223	707	1,889	71
1910 . .	35,793	658	2,608,849	1,598	2,714	74
1911 . .	38,355	667	3,021,493	1,168	1,495	100
1912 . .	40,764	674	2,058,948	582	1,207	98
1913 . .	43,041	690	3,555,330	1,137	2,577	84
1914 . .	46,731	740	4,694,611	1,420	3,741	72

The reason of the steady increase in the number of members is to be found, not only in the advantages offered by the Federation, but also in a wise provision made by the Managing Committee whereby, instead of paying at once the full amount of a share — 50 lire — one half may be paid at once, and the other half in three annual instalments.

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THE CO-OPERATIVE AGRICULTURAL CREDIT BANK OF TUSCANY IN 1915. — Report of the Managing Committee for 1915, published in "Il Commercio dell'Italia Centrale," Florence, N. 19, February 20th., 1915.

This co-operative bank was established in 1913, for the purpose of making advances to members to supply farms with live and dead stock, to purchase agricultural machines and implements, manures, seeds, etc., to give credit on growing crops, to discount bills of exchange, etc. On December 31st., 1915, this bank contained 353 members (290 at the close of 1914), with a share capital of 73,300 lire, as compared with 54,100 lire at the close of 1914. In 1915 the bank effected 391 credit transactions for 568,483 lire (compared with 144 for 199,453 lire in 1914). The net profits amounted respectively to 2,742 and 8,123 lire. The increasing confidence of the public in this bank is proved by its deposits and re-discounts in 1915, the one amounting to 250,043 lire and the other to 411,261 lire.

SWITZERLAND.

THE FEDERATION OF CO-OPERATIVE DAIRIES AND CHEESE FACTORIES OF NORTH-WEST SWITZERLAND. — *Schweizerisches Zentralblatt für Milchwirtschaft*, Brougg, No. 6, February 10th., 1916.

The position of this Federation on May 1st., 1915, according to the last annual report, was as follows :

	Number of affiliated Co-operative Societies	Number of members of the affiliated Societies	Number of Cows	Daily Production of milk
Cantons:				
Aargau (Frickthal)	25	775	2,522	14,637
Baselland	63	2,302	9,584	53,933
Berne	52	1,678	5,970	29,583
Solothurn	83	2,542	11,619	62,477
Individual members	—	—	868	3,580
Total . . .	223	7,297	30,563	164,210

The Federation of Co-operative Dairies and Cheese-factories of North-West Switzerland, is certainly one of the best-organised Federations of Dairies in Switzerland.

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AMENDMENT OF THE RULES OF THE GENEVA FEDERATION OF CATTLE-BREEDING SOCIETIES. — *Journal d'agriculture suisse*, Geneva, No. 11, March 14th., 1916.

The Federation of Cattle-Breeding Societies of the Canton of Geneva held an extraordinary Meeting of delegates at Geneva on March 8th. There were present 45 delegates and Committeemen. Amongst the various questions discussed were some proposed modifications of the rules. An important amendment was made to Rule 15, whereby the Committee will henceforth be composed of as many members as there are affiliated societies, each society nominating one committeeman.

Part II: Insurance and Thrift

SWITZERLAND.

LEGISLATION AND REGULATIONS CONCERNING AGRICULTURAL INSURANCE (*Continued*)

by Dr. G. Rocca.

§ 3. Hail insurance companies.

There are in Switzerland two national mutual companies carrying on insurance against damage from hail, the *Société Suisse* with head-quarters at Zurich, working throughout the whole Confederation, and the *Paragrêle*, confined to the canton of Neuchâtel.

The objections to a too restricted sphere of operations have been frequently pointed out by the Federal Office, and in the last report (see the article previously quoted in No. 59 of the *Bulletin*) they are clearly indicated. It is only necessary to bear in mind that hail risks affect, not only one single insured object, but a group of neighbouring objects, varying in extent according to the magnitude of the storm. In order to avoid an accumulation of risks the companies must proceed to an accurate selection, accepting insurances in certain communes only up to a fixed sum (called the maximum or full risk) or taking care that there should be a certain proportion between the sum insured and the area of the land cultivated, or lastly, reinsuring part of the risk. But a local society like the *Paragrêle* cannot avoid an accumulation of risks, and this is the more dangerous in that the property insured is chiefly vineyards, and of all crops, vines are the most liable to damage from hail.

As Dr. Fratzscher says in his valuable work on agricultural insurance, the selection of risk may be made either according to topographical considerations, that is, by calculating the degrees of risk in various localities, or according to the greater or less liability to damage from hail of the crops insured. A society which confined itself to working in districts less exposed to hail-storms and insured only the less destructible produce, would register a minimum of casualities. But it is evident that this system would not meet the requirements of the agriculturists who are interested in insurance against hail, because it should be made possible for every agriculturist, of any district, to obtain a guarantee against such risk. The same author goes on to say that the companies should not regard this object as unattainable, because in drawing up tariffs of premiums each society may adopt such expedients as seem desirable for ensuring equitable treatment of each risk.

But when the sphere of action is very limited, as in the case of the *Paragrêle*, and insurance is effected only for one single kind of agricultural produce, the drawing up of tariffs is empiric and then it easily happens, as stated above, that the first premiums paid do not suffice to cover the damage and it is necessary to exact high supplementary premiums.

The system of provisional premiums with eventual demand of supplementary premiums still adopted by many mutual societies offers this advantage as compared with the system of fixed premiums, that the whole amount is divided into two instalments, one fixed sum payable in spring, and the other, variable, payable after the harvest. It is true that the insured person cannot know precisely at the beginning of the year how much his insurance will cost him, but on the other hand he has a guarantee that the total amount of the premium really corresponds to the requirements; it may also suit him to pay by instalments, and in good years the provisional premium may be sufficient to cover all damage. But in practice, as Fratzscher observes, the companies, either through competition among themselves, or by error of judgment, reduce the first premiums to so low a figure that they are obliged to exact very high supplementary premiums. Thus agriculturists, who have often been told by the agents of the company that the first premium will be sufficient, and that only in exceptional cases will supplementary premiums be required, feel the second premium the more burdensome.

TABLE V. — *Hail Insurance Companies in* 1913.

	Profit and loss account		Balance		
	"Le Paragrêle"	"Société Suisse"	"Le Paragrêle"	"Société Suisse"	
	Francs	Francs	Francs	Francs	
Receipts.					*Assets.*
Bronght forward from preceding year. .	177.00	—	280.60	2,168.43	Cash.
Reserve for outstanding risks	(1)	(1)	104,710.00	3,603,000.00	Securities.
Other reserves	66,750.00	—	—	10,000.00	Caution-money deposited.
Premiums paid up	57,610.90	1,049,823.70	61,044.80	307,875.70	With banks.
Profits of investments	5,172.83	154,449.54	21,588.35	—	Sundry debtors.
Other receipts	—	3,660.71	—	128.60	Sundry items.
Total. . . .	129,710.73	1,207,933.95	—	—	Profit and loss account (brought forward from debtor account.
			187,633.75	3.923,172.73	Total.
Expenses.					
Claims paid	120,368.30	781,684.70			
Commission and agency expenses . . .	1,167.70	59,040.50			
General expenses and taxes	5,245.28	118,911.33			
Reserve for ontstanding risks	(1)	(1)			*Liabilities.*
Reserve for compensation for damages .	2,414.00	—	66,750.00	3,624,516.12	Statutory Reserve.
Depreciation	—	303.96	—	50,000.00	Special Reserves.
			(2) 120,368.30	663.15	Sundry Creditors.
Total . . .	129,195.28	959,940.49	515.45	247,993.46	Profit and loss account (bronght forward from credit account).
Excess of receipts	515.45	247,993.46			
Excess of expenses	—	—			
Division of profits:					
To statutory reserve	—	207,993.46			
To special reserves	—	40,000.00			
To be carried forward	515.45	—	187,633.75	3,923,172.73	Total.

(1) Neither company has reserves for ontstanding risks, because the end of the insurance year coincides with that of the working year.
(2) Compensations still to be paid in respect of 1913.

In 1913, as in the preceding year, the *Société suisse* invested all its liquid assets (3,613,000 fr.) in deposits in the various cantonal banks of the Federation; the *Paragrêle* out of its total liquid assets (104,710 fr.) invested 48,790 fr. in State securities, 31,670 fr. in securities guaranteed by the State, and 24,250 fr. in banks, railway, or other industrial securities.

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The liberality of the terms of the policies of the *Société suisse* has already been pointed out in a previous article which appeared in Vol. 48 of the *Bulletin* ; it is therefore sufficient here to recall (as has been done for cattle insurance) some provisions of the federal law regarding the contracts for insurance, more particularly hail insurance.

Section 64 of the law lays down that in the case of insurance of a future gain (as that against hail would be), the damage shall be estimated according to the price which would have been obtained for the crop if it had not occurred. German law does not contain any analogous provision, but from the context it is clear that in this branch of insurance, the compensation could not be calculated according to the usual rule, that is, according to the value of the injured property at the moment of the casualty, but according to the amount of the gain hoped for by the agriculturist. In the majority of cases, damage by hail occurs when the crops have not yet reached maturity and, therefore, are not at their highest value, so that if the usual rule were acted upon, insurance would not give the farmer the guarantee which he requires.

In his proposal the farmer may state the probable return from his crops and may fix the sum assured; since, however, as a general principle, the insurance must never become a source of profit to the person insured and must be limited to recouping him for the loss sustained, if, in case of loss, over-insurance is found to have occurred (that is, if the sum assured turns out to be higher than the real value of the crop calculated on the basis of the average of the preceding years) then the sum assured is reduced to the amount of the real value of the crop.

Some private companies guarantee the full amount of the value insured without any reduction, but this system facilitates undue gain to the claimants and Section 65 of the Swiss Federal Law lays down clearly that, in the case of the insurance of a hoped-for gain, an agreement in regard to the value insured is null and void.

Section 67 allows both parties the right to demand that the damage be estimated without delay. In case, however, of partial destruction of a crop, the estimate of the damage may be delayed, on demand of either of the parties, until the period of harvest.

If one of the parties refuse to take part in the estimation of the damage, and if the parties cannot agree as to the amount, the estimate must be made (except there be an agreement to the contrary) by experts nominated by legal authority.

The fact that the insurer takes part in estimating the damage does not deprive him of the right to oppose the claims of the insured person ; on the other hand any clause that forbids the claimant to take part in estimating the damage is null. The last part of the section lays down that both parties shall share equally in the expense of the valuation.

By Section 68, until the damage be estimated, the claimant cannot, without the consent of the insuring party, make any change in the condition of the damaged property which might render difficult or impossible a determination of the causes of the disaster or of the valuation itself, unless such change be necessary in the public interest or to limit the damage. If the claimant intentionally fails to fulfil his obligation in this respect the insurer is freed from his obligations.

The Swiss Federal Law has not, like the German, any special provision for the case of cession of the land on which the crop is grown. These special provisions decree that the insurer may break the contract only at the end of the period of insurance in which he had notice of the cession. Account is taken of the fact that in this insurance the occurrence of the risk is quite independent of the will of the insured party and that the cession of the ground cannot of itself cause an increase of the risk.

Section 54 of the Federal Law declares that if the object of the contract change owners, the rights and obligations of the contract pass on to the new holder. However both proprietors are accountable to the insurer for the payment of the premium due at the time of the change.

The insurer has a right to annul a contract within fourteen days from the moment in which he was cognizant of the change of holder of the property. His obligation is nullified four weeks after he has notified in writing to the new proprietor the annulling of the contract. He must also reimburse to the acquiring party such portion of the premium as corresponds to the duration of the the contract not yet expired. However, change of proprietor sometimes creates an essential increase of risk, or if the new proprietor within fourteen days after the cession notify in writing to the insurer that he does not intend to continue the insurance, in which cases the rights and obligations derived from the contract do not pass to him.

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The reports of the Federal Office also refer to grants made by the Cantons and by the Confederation for the development of insurance against hail in accordance with Section 13 of the Federal Law of 22nd. December, 1893, on the Improvement of Agriculture, and Section 76 of the Regulations of July 10th for the application of that law.

The grant of the Confederation is made to those Cantons which facilitate and encourage the development of insurance against damage by hail, paying the expenses of the policies, contributing to the payment of premiums, and forming a reserve fund. The federal grant must never surpass that of the Canton.

In Italy and in several other States, the Government confines itself to granting, in case of very severe hail-storms, reimbursement or exemption from taxes, but, unlike the grants, such reimbursements or exemptions are for the benefit of all agriculturists, whether insured or not. Hence they not only discourage the practice of insurance but hinder it by persuading many farmers that the State will compensate them in case of disaster by reducing the taxes. Some writers have objected to the system of grants on the ground that the taxes paid by the whole of the citizens are thus applied for the benefit of one class only, that of insured agriculturists but it may be answered that it is to the general interest to increase the stability of agricultural returns, and to distribute the losses among a large number of persons exposed to the risk; also that such grants are only a temporary expedient, not a permanent institution. If all the small agriculturists, who suffer most from hail-storms, were insured, then undoubtedly, the grants would go to those who most need them and be equally divided.

The grants may also be justified under another aspect, for they enable the societies to which they are given to assume even the heavier risks of those districts much exposed to hail, and generally excluded by private speculative companies from their sphere of action. Undoubtedly, the system of grants presents difficulties in application in a country where many undertakings mutual and joint-stock, organised on different lines and adopting different tariffs of premiums, are at work. But, as Dr. Rohrbeck observes in his valuable treatise on the organisation of hail insurance, there is not this danger in Switzerland, because the *Société suisse* has an almost complete monopoly.

The Federal Council in 1890 had expressed the opinion that the grants should in general be made to insured agriculturists, but not to specific insurance companies, even if these undertake, in return for the grants, to accept proposals of contract from Swiss agriculturists without restrictions regarding the localities most exposed to hail-storms.

It must be remembered that the development of hail insurance has in Switzerland many difficulties to contend with. In many hilly districts where there are not high mountains, the risk is exceptionally serious, and, moreover, the crops insured are particularly susceptible to injury from hail. The giving of grants is, therefore, held to be not only opportune but necessary, to reduce the too high tariff of premiums, and to popularise the practice of this form of insurance amongst agriculturists, until such time as the private companies may have formed large reserve funds, may have insured the greater part of the agricultural produce of the country and may be able to guarantee to their policy-holders full compensation for the damage suffered.

§ 4. The federal law on the supervision of private insurance companies.

We have already remarked that in 1915 thirty years had elapsed since the Law of the 25th. June, 1885, regarding private insurance undertakings was passed by the Federal Assembly, and it is evident from the statistics given above that this law has contributed largely to the development of all forms of insurance in Switzerland. Since even in Italy and other countries it is acknowledged in many quarters to be expedient, if not urgent, that the supervision exercised by the Government over life insurance companies should be extended to companies for insurance against damage and, therefore, to agricultural insurance companies, it seems desirable here to explain briefly the chief provisions of the Swiss Law in regard to agricultural insurance.

Section 1 of the law declares that the supervision of private insurance undertakings, assigned to the Confederation by Section 34, Subsection 2 of the Federal Constitution, is to be exercised by the Federal Council. All private undertakings, national or foreign, intending to work in Switzerland are subject to such supervision: only those societies are exempt whose sphere of action is limited locally.

Private agricultural insurance companies wishing to carry on business in Switzerland must fulfil the following conditions:

(1) They must submit to the Federal Council the documents showing the general conditions of the insurance they propose to effect; in particular, if they are share companies they must declare the number and value of the shares subscribed, the amount paid up and the rules regulating the further liability of the shareholders; if, on the other hand, they are mutual societies, they must state whether there is a guarantee capital and how it is formed, also whether the insured persons or those who conclude insurance contracts are obliged to make themselves liable, and to what extent, for all eventual losses during the current year.

(2) They must inform the Federal Council of the principles on which they calculate reserves for claims made but not paid at the end of the insurance year, as well as carrying forward of premiums for unexhausted risks of those paid in advance.

(3) Foreign companies must prove that, at their principal place of business, they can acquire rights and contract obligations in their own name; they must give the address of their chief domicile in Switzerland and of a general agent, and lastly, produce a copy of the power of attorney.

(4) Every insurance company is obliged to name in every canton in which it works, a legal domicile at which it may be sued, as well as at its principal domicile, in every suit respecting insurance contracts made with persons living in the canton, unless the contract should specify as *forum litis* the domicile of the plaintiff. Every company must carry out its obligations at the domicile of the insured person, unless the contract should

specify the cantonal domicile of the company. Any clause in a contract purporting to set aside these provisions is null and void.

(5) Every society must deposit a security the amount of which shall be fixed by the Federal Council.

No private company may transact insurance business in Switzerland unless authorised by the Federal Council.

Every society, thus authorised, must send annually to the Federal Council, within six months after the close of its working year *a statement of accounts* which for every branch of insurance must show :

(1) the amount of the insured values at the beginning of the year ;

(2) the insured values corresponding to the premiums paid during the year ;

(3) the number of casualties which have occurred, and the amount of the claims paid ;

(4) the amount of the sums assured at the end of the year and the territorial extent of the transactions ;

(5) data respecting re-insurance ; and in particular, if, and to what extent, the society has re-insured its risks, and if, and to what extent, it has undertaken re-insurance of the risks of other companies.

Together with the above statement, every society must, according to Section 6 of the law present : (1) *a profit and loss account* showing all the receipts and expenses of working, for each branch of insurance separately, specifying the amounts collected in premiums, interest, etc. as also the sums expended in payment of premiums, re-insurance, casualties, commission, administration and other items ; (2) the *balance-sheet*, drawn up at the end of the year showing : (*a*) in the liabilities, the reserves for each branch of insurance and the amount of premiums to be carried forward ; (*b*) in the assets, the real property, the investments of capital and the securities according to their kind and estimated value ; the costs of organisation, the method of paying them off and the credit of the agencies. The balance-sheets of the companies are published in the Official Commercial Gazette of Switzerland.

Besides the statement of accounts, the outstanding insurances both at the beginning and end of the year must be reported, and the premiums received, canton by canton, in order to facilitate the compilation of statistics of the transactions of the company. Every company, if so requested by the Council, must also furnish further information as to every part of its administration, show its books, etc.

There is a very important provision in Section 9 by which the Federal Council is authorised at any time to take such measures as may be considered necessary in the general interest and in that of insured persons. When a company is not in a position to offer the necessary guarantees to insured persons, and does not make within a fixed time such changes in its organisation as the Federal Council may require, the Federal Council may prohibit it from undertaking any new business. In the case of the concession being withdrawn, or the company retiring from business, the caution-money will not be repaid until the company has proved that it

has fulfilled all its obligations in Switzerland, and until notice of the withdrawal or retirement shall have been published in the daily papers three times in the space of six months. Nor will the caution-money be repaid unless there is no attachment or until the attachment has been determined either by private agreement or through legal proceedings.

The Federal Council has power to impose fines not exceeding 1,000 fr. on any company opposing its decisions or on its representatives.

Section 11 lays down strict rules for the protection of agriculturists from unscrupulous insurance companies which deceive the public with false promises and create dangerous illusions. Information must be given to the authorities of all persons who carry on or work for insurance companies not duly authorised, and of all directors, representatives and responsible agents of a company who, in the documents or information which they are bound to furnish to the Federal Council, misstate or conceal the condition of the company, or who publish communications (prospectuses, etc.) containing false statements. Such persons are liable to a fine not exceeding 5,000 fr. or imprisonment for a term not exceeding six months, or to both fine and imprisonment. Those who incur this sentence may also be prohibited for the future from carrying on any further insurance business in the territory of the Confederation.

The law courts have power to decide all questions of private right between companies and insured persons or those who have made a contract of insurance, and this power remains in force even should the concession be withdrawn. Should the company cease to have a legal existence, or should it become bankrupt or lose its right to transact business in the State in which it has its head-quarters the concession is annulled.

The Federal Office, well interpreting the law in question, has decided, in the interests of the insured public, that every agreement by which a company hands over to another company either the whole or a part of its business, and every agreement relating to the purchase of the whole or a part of the business of another company must be submitted to the approval of the Federal Council. The company is also obliged to state in francs the insured values named in the policy and in all publications in which the capital is mentioned, to show clearly how much of that capital is paid up.

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Lastly, we must mention a special tax imposed by the law of 1885 on insurance companies as a contribution to the expense incurred by Government in the working of the Supervision Office.

Every authorised company must annually pay this tax of 1 per thousand on premiums in Switzerland. The tax is calculated on the amount of the premiums : (*a*) on insurances effected in Switzerland, the insured persons living in Switzerland ; (*b*) on insurances effected by the managing body,

if it has its central office in Switzerland, or by its agents in Switzerland, the insured persons living abroad : (*c*) on insurances effected abroad, if the respective premiums are paid in Switzerland to the managing body or to the Swiss agents of the company.

The tax is calculated according to the gross premiums ; hence premiums paid for reinsurance cannot be deducted. For the exaction of the tax every company must communicate annually to the Ministry of Justice and Police the amount of the premiums received, and the said Ministry fixes the amount of the tax. The calculation is made provisionally on the basis of the returns of the previous year, but the amount of the tax is not definitely fixed until after the societies have sent in the returns relating to the financial year in question. If this second calculation shows an increase or a decrease as compared with the provisional calculation, the difference will be equalised by a supplementary payment, or a rebate on the tax payable the following year.

The Regulations concerning the exaction of this special tax bear the date 29th. October, 1886, and fix a summary procedure for settling all disputes to which its exaction may give rise. Appeals against the decision as to the amount of the tax are referred to the Federal Council, and must be presented 30 days after the day in which the amount of the tax was announced. However the payment of the tax must be made within 30 days from the issue of the notice ; in the case that it is not paid within this period, the Council is authorised to impose a fine on the company, and should the delay in payment continue, to cancel the concession. Proceedings are not suspended by reason of appeals, there being full application of the general principle of financial law : *Solve et repete.*

Of the two following tables, the first (Table VI) gives the amount of premiums paid in the various cantons of Switzerland to the agricultural insurance companies, and shows also how the societies themselves endeavour to extend their business in all the cantons, so that all agriculturists may profit by the advantages offered by insurance. Table VII gives the total amount of premiums paid to the said companies from 1886 to 1913, and from both tables we may form an idea of the importance of the task entrusted to the Federal Office of Supervision.

TABLE VI. — *Premiums paid in Switzerland in 1913, showing separately the premiums paid in each canton for each branch of insurance.*

Canton	Average Population in 1913 (1)	Livestock Insurance	Hail Insurance
		Lire	Lire
Zurich	534,250	45,303	70,567
Berne	660,640	104,636	235,725
Lucerne	172,500	53,141	155,493
Uri	22,730	2,891	—
Schwyz	59,210	5,002	21,006
Upper Unterwalden	17,650	212	4,776
Lower Unterwalden	13,980	1,054	7,326
Glarus	33,750	1,860	16
Zug	28,940	12,890	26,143
Fribourg	142,690	27,966	30,572
Soleure	121,240	21,056	49,678
Bâle City	142,870	24,484	1,028
Baselland	78,550	17,739	23,157
Schaffhausen	47,270	12,184	35,469
Appenzell, Outer	58,670	2,958	13,467
Appenzell, Inner	14,860	232	2,214
St. Gall	315,160	32,077	34,324
Grisons	119,860	11,121	—
Aargau	236,860	59,927	83,778
Thurgau	140,540	13,437	31,270
Ticino	160,680	12,387	—
Vaud	327,870	111,613	115,643
Valais	130,750	21,971	2,064
Neuchâtel	134,910	13,656	85,689
Geneva	160,966	25,982	78,028
Foreign countries or canton not stated	—	2,539	—
Total	3,877,210	638,318	1,107 437

(1) Calculated according to the federal census of the population taken on 1st. December, 1910.

TABLE VII. — *Premiums paid in Switzerland from* 1886 *to* 1913 *to Agricultural Insurance Companies subject to Federal Supervision.*

Years	Livestock Insurance	Hail Insurance
	Francs	Francs
1886	16,231	121,457
1887	42,281	111,362
1888	75,148	115,348
1889	107,833	120,943
1890	129,337	205,273
1891	139,463	282,128
1892	149,622	347,323
1893	153,202	456,600
1894	154,275	567,661
1895	163,630	582,648
1896	208,067	716,068
1897	243,999	703,220
1898	285,500	846,057
1899	308,346	723,632
1900	320,919	762,599
1901	354,220	701,599
1902	369,893	675,015
1903	375,712	846,605
1904	403,498	885,630
1905	443,414	922,318
1906	483,795	970,966
1907	516,234	917,333
1908	543,601	1,076,606
1909	558,298	1,001,329
1910	598,367	1,098,168
1911	619,727	1,224,667
1912	635,972	1,393,591
1913	638,318	1,107,435
Total	9,039,002	19,483,742

The total amount of the premiums paid to agricultural insurance companies (hail and livestock) from 1886 to 1913 was, as shown by the preceding table, 28,522,744 fr., while during the same period the total amount o the premiums paid to all the insurance companies working in Switzerland exceeded 1,500,000,000 fr. In 1913 the premiums paid to agricultural insurance companies alone amounted to 1,745,753 fr., while those paid to all the companies amounted to more than 108,000,000 fr. The six agricultural insurance companies, of which we have described the development, form only a small proportion of those under the Federal Supervision Office. Under this Office there are 107 companies (27 for life insurance, 20 for accident insurance, 28 for fire insurance, 19 for loss of tenancy, 20 for risks in transit, etc.). But many of these companies transact business among agriculturists, either as regards accidents in agriculture or risks of fire in farm buildings, etc.

Comparing Table VI with the figures of the preceding year, it will be seen that in the branch of hail insurance there was a slight increase in the amount of the premiums only in the Canton of Bâle City, while in insurance against mortality in livestock there was an increase in the premiums in the cantons of Uri, Schwyz, East Unterwalden, Fribourg, Soleure, Baselland, Schaffhausen, St. Gall, Aargau, Thurgau, Ticino, Valais and Geneva. The difference is explained if we remember, as already pointed out, that in 1913 there were in the spring many frosts which destroyed so much produce at the beginning of the season that many agriculturists were deterred from insuring.

Agricultural associations have often expressed a wish that hail insurance companies in their policies would also cover the risk of frost, but hitherto there have been few examples of this kind of insurance, in regard to which there are serious technical difficulties. In any case the fact that Swiss agriculturists, from 1886 to 1913 have invested more than 28,500,000 fr. in premiums for livestock and hail insurance is sufficient to show how highly they appreciate this form of insurance.

Part III: Credit

RUSSIA.

NON-CO-OPERATIVE POPULAR CREDIT IN RUSSIA.

OFFICIAL SOURCES:

Отчетъ по мелкому кредиту за 1910 и 1911 годы съ главнѣйшими данными за 1912 годъ. (*Report on Small Credit in the years* 1910 *and* 1911, *with the Principal Data for the year* 1912). Petrograd, 1914.

Отчетъ о состояніи крестьянскихъ обществтенныхъ учрежденій мелкаго кредита по даннымъ на 1 января 1913 года. (*Report on the Situation of the Communal Peasant's Small Credit Institutions according to the data up to January 1st.*, 1913). Petrograd, 1914.

Сельскохозяйственный кредитъ въ Россіи. (*Agricultural Credit in Russia*). Published by the General Direction of Agricultural Organisation and of Agriculture. Petrograd, 1910.

Вѣстникъ мелкаго кредита. (*The Messenger of Small Credit*). Weekly Review of the General Direction of Small Credit Business. Petrograd, 1915.

OTHER SOURCES:

KRIVTSCHENKO: Die ländlichen Kreditgenossenschaften in Russland. (*The Agricultural Co-operative Credit Societies in Russia*). Stuttgart and Berlin, 1910.

Н. Доброхотовъ: Положеніе объ учрежденіяхъ мелкаго кредита. (*Regulations concerning Small Credit Institutions*). Petrograd, 1914.

Under this title is comprised a series of institutions founded at different periods and in different parts of the Russian Empire, for the most part local in character, and constituted as determined by special local conditions.

In the course of time, circumstances changed, and many of these institutions changed form or gave up business; those still existing are, with rare exceptions, mere anachronisms, of little use except for the study of

the origin of popular credit. They possess little beyond their traditions and but few of them have the necessary vitality.

In the following pages we shall give some details respecting the most important of these institutions, dealing with each more or less according to its importance.

§ 1. Communal funds and banks for the assistance of orphans.

Non co-operative popular credit in Russia dates from the reign of the Empress Catherine, about the middle of the 18th. century. After the conquest of the Taurida, the colonisation of that region was energetically begun, chiefly with German settlers, among whom are to be found the first traces of non-co-operative popular credit institutions, in the form of Communal funds (*Mirskie Kapitali*) serving many purposes, and granting loans to members of the community only as a secondary line of activity.

Communal banks for the assistance of orphans (*Sirotskija obchtchestwennija kassi*) were founded by German settlers in the south of Russia for the purpose in the first place of deciding the destination of property of deceased members, and, in the second, of assisting agriculture by granting loans to cultivators.

When they were founded, the Government allowed them complete liberty, and not till 1803 were they placed under the control of competent authorities. The Orphans' Banks worked successfully, and at the present time they still continue their labours. On the 1st. January, 1913, they were 25 in number, situated exclusively in Bessarabia and the Province of Kherson ; their working capital amounted to 6,000,940 roubles, of which 5,652,481 roubles were deposits. This large amount entitles the Orphans' Banks to the first place among non-co-operative popular credit institutions.

After the abolition of serfdom in the Baltic provinces in the second decade of the last century, the " Communal Banks of the Baltic Peasants " were founded, one being even in the Island of Esel. The necessary funds were obtained from the sale of surplus corn in the stores for the provision of the rural communes, from money supplied by the communities, from donations and legacies, etc.

These establishments are no longer in existence ; although in past days they have rendered excellent services, yet they have not been able to resist the action of time. We have mentioned them merely to show that the question of popular credit in Russia has been long under consideration, though it has only entered its acute phase during the last few years.

§ 2. Savings and loan banks.

In 1840 the Government felt obliged to introduce order into the credit banks, which till then had been established after a sporadic fashion.

Count Kisselieff, who was then Minister of the Crown Lands, proposed

to create in connection with *volost* (Governments of rural communes) for peasants on the State property:

(1) Loan Banks (*Vospomogateljnija Kassi*) to be founded by means of the peasants' money deposited temporarily at the office of the Ministry charged with its management. Loans were to be granted to peasants on the guarantee of the communal assembly or of certain proprietors. The guarantors were to have no right to credit from the bank until the loan was paid. The amount of each loan might vary from 5 to 60 roubles, at 6 per cent.

(2) Savings banks (*Sberegateljnija Kassi*) to be established with the *volost* that already had Loan Banks. These banks were to receive deposits from peasants and soldiers of the reserve established as farmers on the lands of the State. These banks were to pay interest at the rate of 4 per cent. on deposits.

The Minister's scheme was approved by the Emperor in 1840 and soon afterwards banks were founded in five provinces (Petrograd, Moscow, Tambov, Yaroslavl and Smolensk), and began business on a very small scale at first. But by degrees they spread over the whole Empire, and after the abolition of serfdom (1861) they worked, not only for the benefit of the peasants of State lands, but also for those who had belonged to private individuals.

These two forms of banks, at first intended to be two independent institutions, are now fused into a single organisation, Savings and Loan Banks (*Vospomogateljno-sberegatelijnija Kassi*).

The Official Bulletin of the above-mentioned Ministry explains the reasons of the Government for devoting more attention than before to agricultural credit.

"The Ministry immediately after its formation (1837) was convinced that the difficulties encountered by the agricultural population in procuring the money necessary for the payment of their taxes and for the requirements of agriculture, impede their progress. When the need of obtaining credit permits of no delay, for instance, when Government taxes fall due, the peasant at once sells his cattle and his corn at very low prices" (1).

It is evident that the Government has very important motives for turning its attention to agricultural credit. It is actuated not only by a desire to apply fiscal measures to facilitate the payment of State taxes, but more important still, to diminish the poverty of the peasants, to help them, and to improve the economic condition of a class which is the foundation of every State. Unfortunately the work of the Savings and Loan Banks as regards credit have had but little success. They worked badly, to the great surprises of their founder. Later it became clear that their organisation and management were both far from perfect, a fact that need not cause surprise as this was a first attempt. The management was too formal and too slow. The banks were entirely dependent on the *volost* and the Assembly of the Peasants (*Obchtchestwennij schold*) could exercise no influence over the managers. Besides, the interest at 4 per cent. by law permitted on deposits, was too low to attract savings for which more remunerative investments

(1) Quoted by Krivtschenko in *Co-operative Agricultural Credit Societies in Russia*, p. 13.

were desired; even in State savings banks depositors also received 4 per cent. but with the advantage of a State guarantee. Thus the influx of money from without was feeble, and their own resources were insufficient to permit of their working as credit institutions.

For every loan of from 5 to 10 roubles the borrower was obliged to furnish special security: a provision which was an instance of excessive formality.

Besides, the person who guarantees repayment cannot avail himself of credit from the bank till the loan has been repaid. The consequences of this will easily be understood; in the province of Archangel, according to information supplied by the local committee appointed "to provide for the requirements of agricultural credit," every kind of credit was refused for a long period to 20,000 guarantors (1).

When their inherent faults were perceived changes were made, here and there, in the banks, but they were only thoroughly re-organised in 1908 in conformity with the general law on popular credit in the Empire. Of this law we shall speak in an early issue of the *Review* in connection with the subject of co-operative credit.

On the 1st. January, 1913, according to the latest official data, the number of Savings and Loan Banks in full working order (exclusive of those in process of winding up) was 1,647, with a capital of 12,304,607 roubles, including profits, and 11,128,678 of savings deposits and money borrowed, making a total of 23,433,285 roubles. The loans were 21,303,845 roubles. Besides this, the banks possessed 1,413,350 roubles in other credit institutions and in securities and real property, also 716,090 roubles in cash. The net profit was 608,813 roubles, and the losses 136,089 roubles.

The number of banks in liquidation was 234.

§ 3. Rural banks for peasants belonging to the crown.

(*Seljskie banki biwschich oudieljnich krestjan*).

These banks were organised on similar lines to the Savings and Loan Banks.

According to the rules issued by the Minister of Crown Property on the 1st. May, 1859, they are thus organised:

The original capital is formed from resources supplied out of the Crown property. The banks are at the service of the peasants of Crown property only, and they are not dependent on the *volost* (like the Savings and Loan Banks), but on the "Chancery of the Administration of Crown Property." Loans may be granted where security is given or on a mortgage of cultivated land or building ground, but they must in no case exceed 200 roubles.

(1) "Agricultural Credit in Russia", 1910, p. 75, published by the General Direction of Agricultural Organisation and Agriculture.

In 1904 when there was a general revision of popular credit with a view to the re-organisation of these Rural Banks, serious difficulties arose. It was not easy to decide what was their true sphere of action, the radius within which they should work, for the territory of the former Chancelleries and that of the *volost* of the present time do not coincide. Consequently the limits of the sphere of action are not sufficiently definite, and it cannot be said positively that this or that locality is served by this or that bank. Nor has it been easy to decide to whom the capital of these banks really belongs, and to what extent its owners have a right to the credit of the institution.

However that may be, the banks are most numerous in the middle region of the Volga (provinces of Simbirsk, Nizhny Novgorod, Ufa) and in industrial districts like the provinces of Kostroma, Wladimir, Tver, etc.

On the 1st. January, 1907, there were 164; on the 1st. January, 1913, the number had fallen to 118. Their capital amounted on the 1st. January, 1913, to 1,810,571 roubles; the deposits and sums borrowed only amounted to 93,090 roubles. We have no other example of a sum so small in any other non-co-operative institution of agricultural credit.

The total amount of loans granted was 1,540,188 roubles; the assets deposited in other credit institutions, or consisting of securities and real property, was valued at 305,510 roubles, and the amount in ready money was 57,963 roubles, the net profit 38,956 roubles and the losses 23,046 roubles. These figures testify eloquently to the miserable existence of these peasant banks at the present time; and the fact that in the space of 6 years (1907-1913) their number diminished by 46 (that is by about a quarter) leaves no doubt as to the future reserved for them.

§ 4. Communal deposit and loan banks for Russian Poland.

In 1866 communal banks for deposits and loans (*Gminija soudo-sberegatelnija kassi*) (1) were founded for Poland, very much better organised than those institutions which we have just described. The *Gminij Vogt*, i. e. the Chief of the Commune, was at the head of the administration of these banks, and the two other members of the Council of Management were chosen by the *Gmina* (commune). Three peasant owners not in the employment of the Commune were charged with the supervision of the accounts. The foundation capital was furnished by the Commune; and the State assisted by paying on an average 600 or 700 roubles to each bank, only on condition that as soon as the accumulated profits should amount to the original capital (600 or 700 roubles) they must be devoted to the establishment of a new bank.

Owing to this system the number of banks increased considerably, and the results obtained were satisfactory.

(1) *Gmina* in Polish means commune.

Till the last few years (1906) the loans were not granted on a personal guarantee, but almost exclusively on mortgages of cultivated land or building ground, and preferably to members of the *Gmina* who possess at least 30 deciatines of such land. But loans may also be granted to peasants not possessed of land, provided they are covered by the personal guarantee of a proprietor of 30 deciatines. In general, however, it was not easy for a poor peasant to obtain a loan from these banks. The loans varied between 100 and 200 roubles at 8 per cent. for 12 months, and the borrower had the right to six months' extension.

In 1906 these banks were authorised to make loans on a simple personal guarantee, and their rules were revised so as to bring them more into accordance with the provisions of the Decree of 1904 on the subject of popular credit; on the other hand, they were not placed under the " Direction of Popular Credit " established the same year to act as the superior governing body of all popular credit institutions, co-operative or non-co-operative.

The legislator evidently did not wish to subject these banks to the levelling action of the general law, for on the whole they answered very well to the national and economic character of the country for which they were established.

On the 1st. January, 1907, there were 1,338 banks, with a working capital exceeding 28.8 millions of roubles, of which two-thirds were in savings deposits. On January 1st., 1913, the number of banks was 1,371 with a balance of 41,219,000 roubles; their owned capital amounted to 14,814,200 roubles; the debts contracted with the credit institutions in the Empire to 208,300 roubles; the savings deposits and loans to 24,865,800 roubles. The relatively large amount of deposits shows among other things that the banks enjoy the confidence of the public, and work satisfactorily.

§ 5. Communal loan funds. (*Mirskie saemnie capitali*).

The banks bearing this name have an organisation similar to that of the Banks for Peasants belonging to the Crown. They were founded in 1843 in conformity with instructions from the Minister of Crown Property for the assistance of State peasants. Their capital is derived from different sources, such as the general funds of the State, the profits realised from the letting of Crown lands to the peasants, the funds constituted by fines, and indemnities due to the Communes, etc. Later others were added, for instance, deposits for orphans, deposits made by private individuals, etc. Not only in the sources of capital is there great diversity, but also in the constitution of the banks, and it is often difficult to place them in any class of credit institution. Many among them have nothing communal but the name, for after the abolition of serfdom they have had to adapt themselves to the new economic and social conditions. In many cases they have been successful, owing to the elasticity and activity of their first

organisation : nevertheless they have not been able completely to adapt themselves to the new situation, so that their present position, even among non-co-operative institutions, is not very important.

They are found in the greatest number in the western provinces, for instance Grodno, Minsk, Volhynia, Mogilev, Vilna etc.

On the 1st. January, 1905, there were 1,513, i. e. 29 per cent. of the total number of non-co-operative credit organisations existing for the benefit of peasants. But on the 1st. January, 1913, the number of working banks was only 732 with a total capital of 4,508,660 roubles and 478,843 roubles in deposits. The net profits amounted to 213,185 roubles, the losses to 19,294 roubles. There were also 51 banks in liquidation.

To the same class belong the Loan Banks of Bashkirs, Kirghiz, Yakuts, etc., called also " Banks for Foreign Races " (*Inorodtcheskiya kassi*). Of these in 1905 there were 92, of which more than half were moribund.

§ 6. Rural and communal banks (*Selskie i volostnie banki*).

These banks, founded after the passing of the law of 1885, present a more consoling spectacle.

They represent the first attempt after the abolition of serfdom, to create a credit organisation in connection with the new order of things. Unlike former banks, these were not founded to aid a certain group of peasants, but as a single form of credit for the benefit of the whole peasant class, for from that time the legal and economic position of these was more or less equalised throughout the Empire. In founding these banks it was foreseen that all other credit institutions (Savings and Loan Banks, Banks for Peasants who had belonged to the Crown, etc.) would be transformed into Rural and Communal Banks.

The law empowered the Ministers of Finance and of the Interior to draw up the rules of the banks, and to fix all the regulations to be observed by them.

The rules of a bank were to comprise a series of provisions concerning, for instance, the mode of forming the foundation capital, the safeguarding of the funds, the acceptance and repayment of deposits, the rate of interest on deposits, the granting of loans to members, the securities to be required for loans, the formation and destination of reserve funds, the division of profits, the management, revision, liquidation, etc. — in short a minute and elaborate whole, comprising rules not found previously in any bank. Once more experience has been a great teacher.

Notwithstanding all, however, these banks had serious defects, among which may be first observed the absence of any responsible management, and the granting of loans without guarantee. In fact the rules contain no provision deciding the security to be required for a loan, and confine themselves to enacting that the grant must only be made after an estimate

has been made of the general solvency of the debtor. The management is entrusted to the Communal Assembly, but it is in fact in the hands of a few members nominated by the Commune itself. The Communal Secretary, though in the service of the Commune, always keeps the accounts of the banks and is often the only person who has some little knowledge of book-keeping.

In 1895, on the occasion of the first general revision of the credit organisations (to be considered later), these banks underwent alterations, and were in some respects assimilated with other small credit institutions. But it was not found possible to modernise them completely, to transform them radically or to make them into model small credit institutions for the present time.

They were permitted to continue to perform their modest task, though in a somewhat improved conditlon, and another credit institution, which we shall describe, was chosen as a model for the non co-operative small credit banks.

Rural communal banks are scattered irregularly throughout the Russian Empire; they are most numerous and most dense in the provinces of Kiev, Podolia and Volhynia.

On the 1st. January, 1913, there were 704 with a capital of 8,518,440 roubles including profits; the deposits and liabilities amounted to 413,030,944 roubles, the loans granted to 20,298,551 roubles, the available funds to 390,567 roubles, either in credit institutions or in securities and real property, and 760,266 roubles in cash; the net profits amounted to 715,884 roubles, and the losses to 31,573 roubles.

§ 7. Communal deposit and loan banks.

We shall now define the chief characteristics of a last type of popular non-co-operative credit institution, the most modern of all; the "Communal Deposit and Loan Banks" (*Obchchestwennija soudo-sberegateljnja kassi*) the foundation of which dates from the second general revision of the laws on popular credit, which took place on the 7th. May, 1904. The fact that while there were so many popular credit banks in existence, there seemed to be a need of creating a new type is a sufficient proof that the results hitherto attained by the different banks had not been quite satisfactory. Indeed with the single exception of the *Gmina* banks of Russian Poland, none of the banks previously established, whether taken as a whole or considered separately, had contributed much towards supplying the credit required by the Russian peasant.

The usurer continued as before to prosper, the peasant to complain, and the banks to exist at least nominally.

An attempt was made to remedy this condition of things by creating a uniform non-co-operative credit organisation with which the older institutions might gradually be amalgamated.

The " Communal Deposit and Loan Banks " differ but little in their mode of working from co-operative popular credit institutions.

Their rules, sanctioned by imperial decree in 1905, authorise any transaction that may in any way tend to attain the object they seek to accomplish.

The first Communal Deposit and Loan Banks were founded in 1906.

A bank may be established by the vote of a majority of two-thirds of the Assembly of the Peasants ; the decision is laid before the *Zemskij Natchialnik* (District Commissary of Police), who examines the rules, and if he finds in them no violation of private or public interest, he forwards them in his turn to the Provincial Committee which is nominated by the " Superior Direction of Popular Credit " at Petrograd, and has full authority over all affairs of credit in the province.

When the Committee approves the rules it communicates its final decision to the *volost* (Commune) through the *Zemskij Natchalnik*. Only the peasants and Cossacks belonging to the Commune may be members of the bank ; the original capital is formed, either from the contributions of the Commune, from donations, or from loans granted by the Government, the *Zemstvo* or other bodies. It must in no case be under 100 roubles, except when some other kind of bank transforms itself into a Communal Deposit and Loan Bank. To increase the working capital, the banks are empowered to receive desposits, and to borrow up to ten times the amount of the original capital. This limitation is imposed so that the liability of the Commune to the creditors may not be a fictitions one.

The management is entrusted to three members elected by the communal assembly ; peasants in the service of the Commune are eligible, but the Mayor can neither be at the head of the management, nor cashier. If the bank have power to grant to its members loans exceeding 75 roubles, and if it can act as intermediary (in the sale of agricultural produce belonging to its members, etc.) it must have also a Council of Management.

The loans must always be of a productive character (for example, for the purchase of agricultural implements, cattle etc.), and they are granted only for a short term, usually two months. But long-term loans may also be granted for the purpose of making radical changes in an agricultural holding, such as reclaiming marsh lands, the adoption of rational systems of cultivating fields, etc. In no case may the loans exceed 300 roubles.

In May, 1909, there were 301 banks of this kind of which 220 were founded chiefly by the help of funds supplied by the Direction of Popular Credit, and 81 solely out of the resources of the Communes. On the 1st. January, 1913, their number had risen to 1,556, so that in the space of four or five years it had increased fivefold. The working capital and the profits amounted to 14,515,888 roubles, the deposits and loans to 25,312,888 roubles, making a total of 39,828,125 roubles. The loans granted amounted to 36,931,501 roubles ; the banks possessed, besides, either in other credit institutions, or in securities or in real property 1,489,179

roubles together with 1,912,445 roubles in cash. The losses were 73,152 roubles, and the net profits amounted to 1,756,519 roubles.

§ 8. The general situation of non-co-operative popular credit.

Having now described in general outline the principal non co-operative institutions of popular credit it is necessary to group the figures referring to them in summary tables, in order to give a more exact idea of their position.

The total number of these non-co-operative establishments in full work on the 8th. October, 1915, (exclusive of the Communal Banks of Russian Poland) was 4,936 (1) which at the time of their foundation were thus divided :

Institutions founded before 1860	441	
» from 1860 to 1880	2,055	
» » 1880 to 1900	987	of which 454 were founded according to the Law of 1885.
» » 1900 to 1915	808	
Institutions of which the date of foundation is unknown . . .	645	
Total . . .	4,936	

It will be seen that the greatest number were founded between 1860 and 1880, and it is in fact at this date, which immediately follows the abolition of serfdom that the need of credit made itself most pressing. Besides, institutions of popular credit had at this time only recently begun to be formed.

Eighty per cent. of these institutions depend on the administrative organisation of the *volost*; the others on a rural Commune without *volost*. This latter form is frequent in the south of European Russia and Siberia.

(1) From the *Messenger of Small Credit*, No. 42, p. 1815.

On January, 1st., 1913, their assets and liabilities were as follows:

Liabilities	Roubles	
Capital and profits	42,396,399	(1)
Deposits and loans	55,707,105	(2)
Total	98,103,504	

Assets	
In cash	3,343,156
Deposits in credit institutions, securities and real property	4,746,395
Loans granted	90,103,504
Total	98,103,504

On the 1st. January, 1912, the total balance amounted to 87,195,485 roubles.

We now give further data respecting the transactions of these banks:

Deposits of rural communes	8,586,792
» of private persons and of other institutions	45,736,453
» and loans in 1912	22,573,400
Loans renewed	17,443,332
» » in 1912	6,218,141
» granted in 1912	62,853,493
Net profits	7,982,787

(1) Of this sum the Direction of Credit appears as creditor for 769,318 roubles, the State savings banks for 619,095 and the Zemstvos for 10,230 roubles.

(2) The Zemstvos had granted loans to the amount of 16,341 roubles, private persons to the amount of 646,622 roubles and the Imperial Bank to the amount of 720,897 roubles.

Summary Table of Non-co-operative

(Exclusive of the Com

Class of Institution	Number of Institutions	Paid up capital and profits	Deposits and Sums borrowed	Total of the two preceding columns	Loa grant
		Roubles	Roubles	Roubles	Roub
Savings and Loan Banks	1,647	12,304,307	11,128,678	23,434,285	21,30
Rural and Communal Banks	704	8,418,440	13,030,944	21,449,384	20,29
Communal Loan Banks, Type *A* (1)	134	1,190,709	478,183	1,668,892	1,55
Communal Loan Banks, Type *B* (2)	598	3,317,956	660	3,318,616	2,77
Banks for Peasants formerly belonging to the Crown	118	1,810,571	93,090	1,905,661	1,54
Loan Banks of the Bashkirs	40	490,420	10,181	500,601	32
Banks for Orphans of former German Colonists	25	348,959	5,652,481	6,000,940	5,28
Communal Deposit and Loan Banks	1,166	4,515,237	25,312,888	39,528,125	36,93
Total	4,832	42,396,399	55,707,105	98,103,504	90,01

(1) Communal Banks which seek to increase their economic power by receiving deposits and borr

(2) Banks which carry on business only with funds supplied by the Commune.

Among all credit institutions the Communal Loan and Deposit Banks, founded after the new model of 1905 and 1906, occupy a place apart, and the results obtained give promise of a prosperous future.

But taken as a whole, non-co-operative popular credit is absolutely insufficient to meet the requirements of the Russian peasant, and if he had no other for of credit at his disposal agriculture in Russia would be but badly served.

Fortunately there is another and much richer form of credit, the co-operative, which we shall discuss in a future article.

ns of Popular Credit for Peasants.

ks in Russian Poland).

Deposits in other institutions, rities and real roperty	Cash	Total profits	Cost of management	Net profits at the end of the year	Losses at the end of the year	Agricultural holdings in the district in which the institution does business	Debtors
Roubles	Roubles	Roubles	Roubles	Roubles	Roubles		
,413,350	716,090	1,429,813	210,868	608,813	136,089	3,291,880	822,594
390,576	760,266	1,907,860	275,889	715,884	31,573	469,009	403,428
68,804	44.796	131,853	17,861	79,313	3,769	153,835	68,694
424,292	216,742	198,041	27,795	133,872	15,465	531,529	172,815
305,510	57,963	75,691	20,180	38,956	23,046	176,639	49,356
158,043	16,609	14,961	1,456	13,207	—	51,664	9,808
601,710	118,254	318,697	20,714	21,791	12,317	13,967	11,553
,484,179	1,412,495	3,905,961	566,536	1,756,519	23,152	2,097,619	819,313
,746,395	3,383,165	7,982,787	1,141,249	3,368,355	295,411	6,386,042	2,397,561

MISCELLANEOUS INFORMATION RELATING TO CREDIT IN VARIOUS COUNTRIES.

ARGENTINE REPUBLIC.

THE MORTGAGE COMPANY OF THE RIVER PLATE. — *Economist* (London), N° 3,799, January 29th., 1916.

At the annual general meeting of this company, held on January 27th., it was stated that the results of the working in 1915 had been very satisfactory. The gross profits exceeded those of the previous year by £6,380. This increase was due to the fact that the company's clients had been in a position to meet their interest payments with greater promptitude than in the preceding year and also to the fact that the accounts for 1915 included some items of arrears of interest brought over from 1914. The results enabled the company to declare a dividend of 18 per cent. — the rate which had been paid for the past four years — and to place £20,000 to reserve.

The loans were less by £109,656 than they had been a year before. This reduction represented in the main loans repaid in cash, but a small part of it — £3,746 — represented loans foreclosed and now converted into properties. This was the first time for 11 years that the company had had to take over properties under foreclosure, and the amount now appearing only represented one-third of 1 per cent of the total loans outstanding.

The liabilities to the public, exclusive of the permanent debenture stock, did not amount to £100,000. The net profit for the year was £68,478, an increase of £3,700. Including the balance from the previous year there was an amount of £113,498 to be appropriated and it was decided, after paying £36,000 in dividend, to place £20,000 to the reserve fund (raising it to £435,000) and to carry forward £44,998.

It was further stated that the great producing industries of the Argentine Republic — agricultural and pastoral — had reaped large profits from the exceptionally high prices ruling for their products as a result of the war. This had enabled the payment of outstanding debts and eased the financial situation.

DENMARK.

THE CREDIT ASSOCIATION OF PROPRIETORS IN THE DIOCESES OF THE DANISH ISLANDS. — 64de Beretning til Representantskabet for Kreditforeningen af Grundejere i de Danske Östifter.

This is one of the oldest credit associations in Denmark, having been founded in 1851, and it is also one of the most important, in respect of the number of its transactions. In fact at the close of the year 1914-15, the assciation had made 42,159 mortgage loans, to a total value of 556,742,600 crowns, of which 502,205,594 crowns remained outstanding. The abnormal circumstances under which the work of the association was carried on in 1914-15, do not seem to have diminished its activity since during that period it granted 2,260 new loans for a total amount of 27,274,100 crowns; adding to this 8,217, 592 crowns in loans on property already mortgaged we have a total of 35,491,692 crowns.

The average amount of mortgages on each estate is then 16,600 crowns, showing that the association works chiefly for the benefit of holdings of medium extent.

The cases of mortgage loans of larger amount are, however, very frequent. Thus there was one loan of nearly 600,000 crowns, and one exceeding 300,000 crowns, while 43 were between 120,000 and 300,000 crowns: high figures when we reflect that in determining the value of the real property on which the loan is granted, the association does not take into consideration the industrial or special objects for which the land serves or might serve, but only its agricultural value.

Nevertheless against the 45 loans above mentioned there are 246 the value of which varies between 30,000 and 120,000 crowns, and a still larger number (1,841) from 2,000 to 30,000 crowns.

Small holdings, for which, moreover, other institutions provide, thus remain almost entirely excluded from the sphere of action of the association, since only 128 loans are less than 2000 crowns in value.

The association works both in urban and rural centres, but as might be expected in a country conspicuously agricultural in character, the great majority of the the loans are rural, only 778 being in urban centres. But if this number is only about one-third of the total number, the total value amounts to 14,916,500 crowns, that is, more than half the total value of the loans; thus, while as we have seen the general average value of the loans was 16,600 crowns per property mortgaged, this average, calculating that there are already mortgages to the amount of 4,857,775 crowns, rises to about 25,391 crowns for urban real property.

It is well known that mortgage associations may grant loans up to 50 % of the estimated value of property and in some cases up to 60 %. In the case of all the Danish land credit associations the limit of 50 % is rarely reached, and scarcely ever exceeded; in fact in the present case loans

varied between 42.12 and 49.2 % of the estimated value, and the average was 47.8 %. The total value of the mortgaged lands, taking account only of the net return, was 75,352,123 crowns, and calculating only the commercial value it was 68,141,000 crowns, giving an average of 30,150 crowns per property mortgaged.

The repayment of the loans granted in previous years went on regularly: in 1914-15 in this way 231 mortgages amounting to 2,640,200 crowns were extinguished, so that the real increase in the period contemplated in the number of loans was 2,029, and in the total original amount of the loans outstanding 24,633,900 crowns.

To cover the new loans the association, in conformity with the rules, issues bonds (*Kasseobligationen*) which are sold in the Stock Exchanges by the association on behalf of the borrower. During the working year 1914-15 there were put in circulation bonds to the value of 27,276,100 crowns, precisely the amount of the new loans granted, but, as we shall see more clearly later on, the placing of the bonds is for many institutions the principal obstacle to their business because of the closing of many exchanges.

A few words on the cost of management will not be uninteresting, because one of the chief advantages of mortgage credit associations is precisely in the smallness of the burdens under this item of expense laid on their members.

For the association in question it is evident that these expenses show a tendency to increase, because from 0.73 crowns for every 1000 crowns of capital invested in mortgage loans in the year 1905-1906, they rose to 0.90 crowns in 1909-1910 and to 0.97 crowns in 1914-1915. The increased cost is borne almost entirely by new members, since the older members belonging to series already closed contributed in a progressively diminishing proportion.

Lastly it may be noted that in its 64 years of existence the association has granted in all 58,720 loans amounting to 733,351,600 crowns of which 231,146,005 crowns have already been repaid.

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THE CREDIT ASSOCIATION OF THE PEASANT FARMERS OF THE DIOCESES OF THE ISLANDS. — 34te Beretning til Representantskabet for Kreditforeningen of af Ejere af mindre Ejendomme paa landet i Östifterne.

Unlike the preceding Institution, the Credit Association of the Peasant Farmers of the Dioceses of the Islands works exclusively in the country, and chiefly for the benefit of small holdings.

In fact, out of 820 new loans granted during the year 1914-15, 643 were on holdings less in extent than one *Tönde Land*, that is less than half a hectare (1) and while the loans granted on holdings of one or more

(1) One *Tonde Land* is equal to about 55 ares.

Tönde Land amount to 331,850 crowns, those granted on holdings of less extent exceeded one million crowns (1,030,550). The mortgaged plots are often very small : in some districts the average area is 0.11 *Tönde Land* ; in few districts only is the average size of the holding 2 *Tönde Land* ; in one alone does it reach 3.5 *Tönde Land* (nearly two hectares).

The small extent of the holdings with which the institution has to deal is evident from the average value of the loans granted, which did not exceed 1,661 crowns, a very modest figure in comparison with that previously givenn, which was approximately ten times as much (16,500 crowns).

In all the 820 loans amounted to a total of 1,379,649 crowns, on holdings of the value of 3,189,620 crowns, on some of which there were, however, buildings insured for 2,390,039 crowns, a large amount as compared with the value of the land, and increasing always in inverse proportion to the average area of the mortgaged lands. In fact if we consider only the lands inferior in area to one *Tönde Land* we find that the value of the buildings is 1,940,660 crowns while that of the lands is 2,379,474 crowns, a proportion of about 81 % ; while in the case of lands above one *Tönde Land* in area the proportion is reduced to about 55 % (449,379 compared with 810,146 crowns).

Very few of the lands mortgaged are completely without buildings ; 49 in all.

The total area of mortgaged lands in 1914-15 was 7,320,101 square *alen* (1) or about 18,000 hectares.

Naturally, since it deals with such small plots of ground, this association, even more than the preceding, keeps within the legal maximum (50 %) in the proportion between the value of the real property and the amount of the loan, since this proportion does not exceed 43.3 %. The caution with which the Association conducts its business is also shown by the fact that during the year only 12 holdings mortgaged to the amount of 18,550 crowns remained on the hands of the society, and that the losses at the end of the year amounted only to 2,875 crowns.

On the 31st.May,1915,the association held 29,320 mortages amounting to 44,811,900 crowns, on holdings valued at 106,977,299 crowns, while the insured value of buildings was 81,901,547 crowns.

The Report states that the outbreak of the war was the cause of great fluctuations in mortgage bonds. This is a serious drawback, when it is remembered that the Institution must place these bonds on the market, and when their value is very variable it is difficult for the borrower to know on what amount he can count. In specie the maximum value of the obligations was 90 and the minimum was 80.

(1) A square *alen* is equal to 394 square metres.

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THE JUTLAND PEASANT FARMERS' CREDIT ASSOCIATION. — Beretning om Kreditforeningen af Ejere af mindre Ejendomme paa landet i Jylland i dens femogtredivte Regnkabsaar 1 April 1914-31 Marts 1915.

This association, like the last, works exclusively in the country for the benefit of small holdings, but it is of much greater importance, because on the 31st. March, 1915 it numbered 77,781 mortgages, the total original amount of which was 139,438,900 crowns and the total amount outstanding 125,169,617 crowns.

But in the year 1914-15 the amount of its transactions was not very great, for while 2,096 new loans were granted for the amount of 4,432,200 crowns, 1,631 were paid off for a total of 2,757,600 crowns; so that the net increase was only 465 loans, amounting to 1,674,600 crowns.

The Report gives no particulars as to the extent and value of the mortgaged property; it only states that the estimated value of the 2,096 holdings was 9,521,400 crowns, thus bringing up to 312,293,593 crowns the estimated value of the property on which the association held mortgages. The medium value of the loans granted was 1,792 cr., a figure which nearly corresponds with that given for the preceding association.

Two figures given in the report should not be omitted here. The first is the cost of management, which is 2.82 crowns per loan, the smallness of the sum showing the efficient working of the Institution. The other is the rather large number of holdings remaining in the hands of the association ; at the beginning of the year they were 80 in number, and during the year 93 more were added, bringing the total up to 173. But during the year 127 were sold, so that at the end of the year there were 46 unsold, to which, immediately after the closing of the balance sheet 23 were added, making in all 69, a much larger number than that for the preceding association. The Report gives no explanation of this fact.

It asserts however that the business done by the Institution was, owing to the war, much less than in past years, and that serious difficulties arose from the low price of the bonds, this being chiefly due to the fact that many of them were held in Germany, whence after the war had begun they were thrown upon the Danish market.

UNITED STATES.

THE LAND BANK OF THE STATE OF NEW YORK. — Howell (Edwin F.) in *The Economic World*, New Series, Vol. XI , No. 5, January 29th., 1916.

The Land Bank of the State of New York was established in 1914 to serve as the Central Bank of the state's Savings and Loan Associa-

tions, which are in effect local co-operative land banks. A Savings and Loan Association is " an incorporated company for the purpose of accumulating a fund for the purchase of real estate, the erection of buildings, or the making of other improvements on land, or to pay off incumbrances thereon." Its business consists in lending money on the security of mortgages in order to enable its members to acquire the freehold of their own homes. Each association does business in a prescribed territory, and when any association finds that the demand for loans within its territory is greater than it can meet out of its own funds it sends mortgages to the Land Bank in New York. The Land Bank issues bonds against these mortgages, sells them to investors and places the proceeds with the local associations to be used in making further loans. The first issue of bonds by the Land Bank was taken up by the Guarantee Trust Company of New York.

A good deal of criticism has at one time or another been levelled at the Land Bank. It has been urged that Savings and Loan Associations are essentially urban institutions and that any attempt to incorporate them into a rural land mortgage credit system is futile. It is asserted, too, that the provision of the facilities offered by a central credit institute opens the way to dangerous abuses.

Mr. Edwin F. Howell, Managing Director of the Land Bank, writing in *The Economic World*, deals briefly with some of these criticisms. He points out that the local associations are not, like mutual savings banks, associations formed purely for the encouragement of thrift, but are essentially associations of debtors. They run no risk, therefore, of losing anything of their real character by affiliation with a central credit institute. He claims, too, that the changes which have been made in consequence of the establishment of the Land Bank tend to bring the transactions of the local associations under stricter control, and there is, therefore, no reason to fear an undue inflation of credit. As to the nature of the restrictions imposed upon local societies Mr. Howell writes : " In the first place, before 1914 these societies were generally permitted to lend to their members a maximum of 80 per cent of the appraised value of real estate irrespective of its condition. Under the Land Bank revision no loan can be made by any society upon vacant land in excess of 50 per cent. of its value ; upon land where the improvements, properly defined, exceed the value of the land, in excess of 60 per cent. of its appraised value ; and by societies affiliated with the Land Bank, no mortgage pledged with the Land Bank can be made in excess of 75 per cent. of that value. All these are wholesome restrictions. In the second place the power of an association to contract a general liability has been diminished in proportion as it uses money derived from the sale of bonds. In no respect has the position of a New York Savings and Loan Association been weakened by affiliation with the Land Bank. On the contrary, it has been strengthened in the same manner as a National Bank is strengthened by having the power to hypothecate its securities with its monopolistic central institution, the Federal Reserve Bank. "

PERU.

THE "CRÉDIT FONCIER PÉRUVIEN" IN 1914-15. — *Revue économique et financière*, Paris, February, 19th., 1916.

In view of present events, the "Crédit foncier Péruvien" has judged it prudent to suspend temporarily its mortgage loan transactions, and to form funds to be available for repayment of the temporary advances made to it in Europe which it wishes to refund notwithstanding the moratorium.

Unfortunately the difficulties encountered at the present time in Peru in obtaining exchange on foreign countries have made it impossible to remit large sums, and only the sums required for the payment of the coupons of the bonds can be sent.

The consequence of not granting any new loans at present, together with the repayments of debts, has been to lower by about 750,000 francs the total of the business transactions, which in the preceding year amounted to 12,611,860 fr., while to June 30th. 1915 it was only 11,868,364 fr. Since then the Council has decided to resume mortgage transactions within the limits of the available funds.

Circumstances have not, of course, permitted of the increase of capital which had been authorised by the General Meeting of December 17th., 1913,

The profit and loss account of the last two years is given below.

I. Creditor.	1913-14.	1914-15.
Commission and interest on mortgage loans .	1,039,081	999,883
Interest on deferred payments and compensation for loss of revenue through repayment in advance	57,844	51,669
Sundry interest and other receipts	30,762	136,548
	1,127,687	1,188,100
II. Debtor.		
Interest on bonds	625,000	625,000
Appreciation of bonds to be redeemed . . .	34,375	34,375
General expenses	118,820	131,558
Losses on exchange	50,849	103,172
Interest on money advanced	61,851	77,422
	890,896	971,527
Balance carried forward	236,792	216,572
	1,127,688	1,188,100

ROUMANIA.

THE WORK THE "VINE-GROWERS' CREDIT" IN 1914-1915. — *Le Movement Economique*, Bucharest, 1st January 1916.

The balance sheet of March 31st., 1915, shows that besides the original capital of 2,000,000 francs, the bonds in circulation at that date amounted to 5,404,100 francs. The loss was 767,346 francs.

The report of the Council of Management explains this loss in the following way :

The sum of 767,346 fr. 49 is not, properly speaking, a deficit ; all the sums composing it are being paid off : 344,242 fr. 12 of interest will be entirely covered by the interest at 5 % on loans realised by payment after 5 years, and the remainder representing the difference in market value of the bonds negotiated, viz. 423 104 fr. 37 will be covered by different profits of the "Vine-growers' Credit."

The business of the "Vine-growers' Credit" has also been affected by the war. Immediately after its outbreak, the Council of Management decided that the work of the "Vine-growers' Credit" must be restricted, and in consequence the consideration of applications for loans has been deferred.

RUSSIA.

THE WORK OF THE PEASANTS' LAND BANK IN 1914. — Отчетъ Крестьянскаго Поземельнаго Банка за 1914 годъ (*Report of the Peasants' Land Bank for* 1914). Petrograd, 1915.

We extract some of the more important figures from the Annual Report of the Peasants' Land Bank for 1914, its 32nd. year of working.

In consequence of the Decree issued on July 23rd., 1914, by the Finance Committee with the sanction of the Czar, the business of the Bank during the second half of 1914 was subjected to various limitations. In fact, until further orders :

(1) It was forbidden to purchase, on its own account, any new properties, except those belonging to the Bashkirs in the provinces of Ufa, Orenburg and Samara.

(2) It was decided that when a property is bought through the medium of the Bank, or, though not directly by it, but with a loan granted by it and guaranteed by a mortgage on the property, the percentage of the value (estimated by special expert valuation in each case) which may be advanced, shall be reduced as follows : from 90 % to 80 % when the loan is contracted by a single proprietor ; from 85 % to 75 % when by a small peasants' co-operative society, and from 80 % to 70 % in the case of large peasants' co-operative societies and of agricultural communities.

Increase and Diminution in the Properties held by the Bank. — The number of properties offered in sale to the Bank during the year was 375, of a total area of 511,610 deciatines. The purchase of 156 properties of a total area of 216,251 deciatines was approved by the Bank and 73, of a total area of 83,503 deciatines, were actually purchased, for which the Bank paid 11,385,285 roubles, an average of 136 roubles per deciatine.

The properties purchased by the Bank were thus classified according to the classes of proprietor:

Classes of Proprietors	Properties		Area	
	Number	Percentage	Deciatines	Percentage
Nobles	37	50.7	35,007	41.9
Merchants and Honorary Citizens	8	11.0	15,079	18.1
Townsmen	4	5.5	2,016	2.4
Bashkirs: hereditary property (*Votchiniki*)	15	20.5	27,595	33.1
Peasants	5	6.8	2,872	3.4
Various Institutions	4	5.5	934	1.1
Total	73	100.0	83,503	100.0

The Crown properties which, in virtue of the Imperial decree of August 12th./25th. are transferred to the Bank to be re-sold to the peasants, were five in number in the year under consideration, and contained in all 3,107.4 deciatines. The Bank paid 203,740 roubles in all for them, an average of 66 roubles per deciatine.

During the year the Bank ordered the sale by auction of 50,355 properties, but in 49,509 cases (or 98.5 %) the order was withdrawn, either because the debtors paid their debt in time — this occurred in 37,954 cases — or because the Bank made some concession, such as an extension of time, and so on. There remained 847 properties, of which 75 were actually sold by auction.

Their total area was 1,399 deciatines ; the price realised amounted to 193,879 roubles ; the mortgages upon them amounted to 188,717 roubles. Of 27 properties the sale was cancelled ; 50 were redeemed by the owners before the Bank had taken legal possession of them ; of two the auction had not taken place before the end of the year.

There thus remained in the hands of the Bank 693 properties, to which may be added 36 parcels of land of a total area of 801 deciatines. Altogether the Bank remained in possession at the end of the year of 729 properties, of a total area of 16,950 deciatines, on which there were mortgages to the amount of 1,694,150 roubles, or an average of 100 roubles per deciatine.

Sale of the Property of the Bank. — In the course of the year, it was proposed to sell 984,664 deciatines. For about two thirds of this amount (693,257 deciatines) proceedings were begun, but at the end of the year they had been carried through for only 566 properties of a total area of 193,695 deciatines.

Of these 175 (the area of which was 148,563 deciatines) had been bought by the Bank and 391 (containing 45,132 deciatines) had remained in the hands of the Bank on account of loans not repaid.

The value of these properties, together with the expenses incurred by the Bank, amounted to 26,550,276 roubles. By the sale were realised 24,081,168 roubles ; adding to this the income from the properties, 4,119,379 roubles, we get a total of 28,180,547 roubles. The net profit realised by the sale of the properties amounted, therefore, in the course of the year to 1,630,271 roubles.

The Property Held by the Bank. — On January 1st., 1914, the real property held by the Bank comprised 2,838,098 deciatines, of the value of 158,917,688 roubles. Of this area, 1,688,730 deciatines were Crown properties, and 224,026 deciatines were acquired by foreclosure.

During the year 1914, the Bank acquired 103,560 deciatines of the value of 13,283,183 roubles and disposed of 315,785 deciatines.

Taking account of some modifications in the value and in the area of the properties, the real estate held by the Bank on January 1st., 1915, was as follows : 1,561,807 deciatines of the value of 107,289,696 roubles, which had been bought; 866,479 deciatines, valued at 26,942,237 roubles, of Crown properties, and 195,579 deciatines of the value of 11,527,872 roubles acquired by foreclosure. The total real property held by the bank, therefore, amounted in the aggregate to 2,623,865 deciatines, valued at 145,760,005 roubles.

The Administration of the Property. — In 1914 the Bank administered 2,863,454 deciatines, which were divided as follows according to the form of tenure :

Tenure	Properties bought from peasants — Deciatines	Crown properties — Deciatines	Properties acquired by foreclosure — Deciatines	Total — Deciatines	Percentage of the total properties administered by the Bank
Properties let for cash rents:					
a) To peasants	883,007	762,203	127,863	1,773,073	61.9
b) To farmers	50,363	95,544	5,311	151,218	5.3
Let to peasants for rents payable partly in kind	18,837	1,418	2,486	22,741	0.8
Managed by the former owners . .	40,518	405	—	40,923	1.4
Directly managed by the Bank . .	701,513	61,382	72,625	835,520	24.2
Total . . .	1,731,877	922,621	208,956	2,863,454	100.0

As the Table shows, the most frequent form of tenure is letting to peasants, the land so held amounting to 1,815,814 deciatines. In letting its lands, the Bank had regard, in the first place, to the landless peasants. For the most part the duration of the agreement did not extend beyond a single harvest because agreements for longer periods would interfere with the disposal of the properties, so successfully carried out by the Bank.

The area of the forests belonging to the Bank amounted on January 1st., 1916, to 674,769 deciatines. The profit from the forests (including the sale of forests carried out in previous years) was 3,955,156 roubles.

Loan Transactions of the Bank. — The loan transactions of the Bank during the year 1914 may be briefly resumed as follows:

The applications for loans numbered 27,215 for a total amount of 81,663,783 roubles, as security for which 687,797 deciatines of land were offered, an average of one deciatine for 119 roubles. The Bank approved the granting of 27,575 new loans for a total amount of 68,943,420 roubles, creating mortgages on 760,055 deciatines, an average, that is, of one deciatine per 98 roubles. It actually granted 31,180 loans (including renewals of loans approved prior to 1914) to a total amount of 73,523,823 roubles secured by mortgages on 734,580 deciatines, an average of 100 roubles per deciatine.

Economic Condition of the Peasants Aquiring Land. — The economic condition of the peasants at the moment of acquiring land from the Bank or through the medium of the Bank from private individuals, is clearly shown by the following Table:

Economic Condition	Number of Purchasers				Percentage of Purchasers			
	Total	Individuals	Co-operative Societies	Rural Communities	Total	Individuals	Co-operative Societies	Rural Communities
Without land	4,246	3,762	249	235	18.2	25.1	7.9	4.5
Owners of less than 1½ deciatines	3,065	2,327	243	495	13.1	15.5	7.8	9.5
Owners of 1½ to 3 dec.	3,475	2,519	278	678	14.9	16.8	8.9	13.0
» » 3 to 6 »	5,320	3,004	700	1,616	22.8	20.0	22.4	30.9
» » 6 to 9 »	3,144	1,510	628	1,006	13.5	10.1	20.1	19.3
» » 9 to 15 »	2,587	1,174	712	701	11.1	7.8	22.7	15.4
» » 15 to 25 »	1,134	519	251	364	4.8	3.5	8.0	7.0
» » more than 25 »	368	774	70	124	1.6	1.2	2.2	2.4
Total . . .	23,339	14,989	3,131	5,219	100.0	100.0	100.0	100.0

The table shows that the great majority of the purchasers was formed by landless peasants or owners of small properties.

Mortgage Debts and their Repayment. — The total mortgage debt on January 1st., 1914, was 1,326,632,356 roubles divided amongst 375,280 mortgages; on January 1st., 1915, however, the debt had risen to 1,386,452,474 roubles, secured by 408,000 mortgages.

The total of the repayment instalments becoming due during the year amounted to 65,328,414 roubles; to this should be added 18,414,161 roubles for instalments in arrears, making a total of 83,743,952 roubles. Only 49,892,749 roubles were, however, actually received, being 59.6 % of the total sum and 74.4 % of the instalments becoming due during the year.

Liabilities and Resources of the Bank. — The bonds issued by the Bank amounted on January 1st., 1914, to :

399,927,500	roubles at	4 %
349,624,900	" "	4 ½ %
498,080,650	" "	5 %
4,300	" "	5 ½ %
46,826,630	roubles 59 kopecks at	6 % (bonds held by name)

Total: 1,294,463,908 roubles 59 kopecks.

To this must be added 174,570,407 roubles 74 kopecks, the initial debt of the Bank taken over from the agricultural banks; the total sum, therefore, amounts to 1,469,034,388 roubles 33 kopecks.

In the course of the year the Bank issued new 4 % and 5 % bonds to the value of 94,270,400 roubles and bonds to the value of 53,021,436 roubles 83 kopecks were redeemed.

The mortgage debts taken over from the agricultural banks amounted to 4,420,314 roubles 83 kopecks, and 943,118 roubles were paid for the extinction of the debts of the agricultural banks.

Thus on January 1st., 1915, the total bonds in circulation amounted to 1,513,760,549 roubles.

The payments to be made by the Bank amounted on January 1st., 1914, to 35,232,439 roubles and during the year other debts to the total amount of 78,988,907 roubles became payable. But the Bank only paid 75,793,881 roubles, and deferred payment of the remainder (38,427,475 roubles) to the following year.

The nature and amount of the capital of the Bank on January 1st., 1914, were as follows :

The owned capital amounted to 10,200,064 roubles 16 kopecks; the reserve to 19,185,875 roubles 18 kopecks; and the inalienable capital,

granted by the Emperor Nicholas II on the occasion of the tercentenary of the Romanoff dynasty, to 1,031,530 roubles.

During the year the reserve was increased by 9,026,360 roubles 81 kopecks reaching thus the total of 28,212,236 roubles 62 kopecks. The, capital of the Emperor Nicholas II increased by 2,828,150 roubles, the profits from the sale of Crown properties, and, accordingly, the total amount of this capital on January 1st., 1915, was 3,859,700 roubles.

The business year closed as follows: Receipts, 28,013,990 roubles, 52 kopecks. Expenditure, 18,997,629 roubles 81 kopecks. Net profit, 9,026,360 roubles 81 kopecks, all of which was carried to the reserve.

Part IV: Agricultural Economy in General

AUSTRALIA.

LAND SETTLEMENT IN QUEENSLAND. (1)

SOURCES (OFFICIAL):

OFFICIAL YEAR BOOK OF THE COMMONWEALTH OF AUSTRALIA. Nº 8, 1915. Statistics for the Period 1901-1914. Melbourne, 1915.
STATISTICS FOR THE STATE OF QUEENSLAND FOR THE YEAR 1914. Brisbane, 1915.
A. B. C. OF QUEENSLAND STATISTICS 1913 and 1914 (Two pamphlets). Brisbane.

§ 1. GENERAL INFORMATION.

Queensland, the second in size of the states of the Commonwealth, occupies an area of 670,500 square miles in the north-eastern corner of the continent. The Darling Downs in the south is the principal district within the temperate zone and the climate here is delightful nearly the whole year round. The other districts of Southern Queensland are semi-tropical, and the northern part of the state is generally hot. The Pacific districts are as a rule moist and warm; the west dry and hot; and it is only in the south and south-west that frost and cold winds are known. In the western districts the rainfall in some parts is small; on the Darling Downs, which are elevated and lie from 80 to 120 miles from the coast, it is in general sufficient, while in the north there is a region of heavy tropical rains where the fall amounts sometimes to more than 160 inches in the year.

(1) A general article on Land Settlement in Australia was published in the *Bulletin* of March, 1913, and an article dealing with Land Settlement in New South Wales appeared in our issue for August of the same year. We dealt with Land Settlement in Victoria in a recent issue (January, 1916).

The state's resources are mainly pastoral, though in the last few years much attention has been devoted to sugar cultivation, wheat growing and dairying. The coast districts and the semi-tropical latitudes provide excellent pasture for horses and cattle, and the drier districts of the interior are admirably adapted to sheep-raising. Stock are fed almost entirely on the native grasses and it is only in a few places that lucerne or some similar crop is grown for the purpose of fattening cattle for the home market. The following table gives the number of stock for the years 1912,'13 and '14.

TABLE I. — *Queensland*: *Live Stock.*

	December 31 1912	December 31 1913	December 31 1914
Horses	674,573	707,265	743,059
Cattle	5,210,891	5,322,033	5,455,943
Sheep	20,310,036	21,786,600	23,129,919
Pigs	143,695	140,045	166,638

The yield of the principal crops grown in Queensland in 1914 was as follows: maize 4,260,673 bushels, wheat 1,585,087 bushels, barley 105,613 bushels, sugar-cane 1,922,633 tons, hay 102,193 tons, potatoes 29,195 tons. Minor crops grown are bananas, pineapples, oranges, tobacco, coffee and green fodder crops. The state's production of wool in 1914 was 155,478,740 lbs. The total value of exports for the year 1913 (the last for which full statistics are available) was £12,312,775, the chief items in the list being wool £5,233,919, meat (all kinds) £3,232,890, hides and skins £876,879, butter £855,456, tallow £700,394.

A large proportion of the total area of Queensland is leased in runs for pastoral purposes, the typical run being an immense area of land the rent of which is calculated per square mile. Special facilities are offered both under the *Land Acts* and under the *Closer Settlement Acts* for the acquisition of agricultural homesteads. A considerable area is still covered with natural forest, chiefly of eucalypti, pine and cedar. The scrub lands of the state —land covered with bushes and dwarf trees—furnish magnificent soil, but the labour of clearing such lands is often heavy, and fires are a source of anxiety to both farmer and grazier. Rabbits are a pest in the pastoral districts and do great damage; but the chief difficulty encountered in agriculture and stock-raising is the periodic recurrence of severe droughts. The damage from drought is still from time to time enormous, but is being lessened by the construction of dams and the sinking of wells. The largest area under irrigation is in the north and is devoted mainly to sugar-cane growing.

The population of the state at the census of 1911 was 605,813, Queensland ranking after New South Wales and Victoria. The proportion of non-European races (exclusive of aborigines) is comparatively high, being 24.75 per thousand, a proportion exceeded only by Western Australia with 25.81 per thousand; while the number of aborigines — 8,687 in 1911 — exceeds that of any of the other states of the Commonwealth.

§ 2. Land settlement legislation and administration.

Previous to 1859 the colony of Queensland formed a portion of New South Wales under the name of the Moreton Bay District. Following separation from the mother-colony, the first parliament of Queensland, which met in 1860, passed three acts dealing with Crown lands — two relating to the occupation of pastoral lands and one to settlement in general. The pastoral acts were amended at intervals down to the year 1882, and in the meantime, in 1868, an act of some importance was passed which provided more land for agricultural purposes at the expense of the large runs devoted to pastoral use. The general settlement act passed in 1860 was of no great importance, but a more comprehensive measure was passed in 1866 which introduced the principle of granting leasehold occupation with the right of purchase, — in effect the principle of deferred payment. The *Crown Lands Alienation Act* 1868 threw open to settlement large areas which had been reserved for grazing, and at the same time made the conditions of acquisition much more liberal. The application of the act was much extended in the *Homestead Areas Act* 1872 and the *Crown Lands Alienation Act* 1876. In 1884 there was passed the *Crown Lands Act* which provided for the constitution of a Land Board which administered the acts relating to settlement until the establishment of the Land Court by an act of 1897. The Act of 1884 also gave additional security of tenure to lessees of pastoral lands, prescribing certain proportional parts of such lands for settlement but giving the lessees fixed tenures — fifteen years, increased later to twenty-one and, later again, to twenty-eight — of the remainder of their holdings. The act was, after various amendments, finally repealed by the *Land Act* 1897 (amended in 1902, 1905, 1908 and 1909) which, together with the amending acts, was in turn repealed by the *Land Act* 1910, at present in force. Closer settlement in the state is regulated by the Closer Settlement Act 1906 which consolidated and repealed various acts bearing the title of *Agricultural Lands Purchase Acts*, passed from 1894 to 1905. The *Closer Settlement Act* was amended in 1913.

§ 3. Existing tenures.

Before dealing with the existing system under which Crown lands may be alienated we need only refer briefly to the subject of free grant or reservation of land for public purposes. The power to make grants and to

reserve lands from sale, lease or licence, for any public purpose whatever, is vested in the Governor-in-Council by the Act of 1910, and under an act of 1906 the Governor-in-Council has power to reserve any Crown lands and declare them to be, in perpetuity, a State Forest or a National Park. The areas alienated by free grant under the *Land Act* — for educational and charitable purposes, for public buildings, cemeteries, new roads, recreation grounds, etc, — are small, and the total area affected is insignificant. In 1912, for example, there were sixty-two free grants issued for a total area of 283 acres ; while in that year a net area of 250,372 acres was reserved for timber, and 44,198 acres were reserved for camping, watering and other purposes.

Apart from grant or reservation the methods of disposing of Crown lands may be classified as follows : (1) *Sales by Auction and Special Sales*, (2) *Conditional Purchase*, (3) *Leases and Licences*, (4) *Closer Settlement Sales, Leases and Licences*, (5) *Mining Leases and Licences*.

We shall deal with alienation and occupation under each head, giving statistics for the four years 1910-1913. In the summary tables in the section which follows we are able to bring the figures down to 1914.

(1) *Sales by Auction and Special Sales*. —With the approval of the Governor-in-Council any Crown lands may be offered for sale by auction. The upset price is to be not less than £8 per acre for town lands, £2 per acre for suburban lands and 10*s*. per acre for country lands. The notification of sale published in the *Government Gazette* must specify the amount of the deposit to be paid on purchase, as well as the term allowed for payment of the balance, which may not exceed ten years. Under certain circumstances, and subject to certain restrictions, detached parcels of land may be sold to the owners of adjoining land at a price to be determined by the Land Court ; and where the occupier of any land can prove that, owing to danger from flood or for other reasons, it is unsafe for him to reside upon his holding, he may be allowed to purchase an area not exceeding ten acres out of the nearest convenient Crown lands, at a price to be determined as before by the Land Court.

Land may also be sold upon terms known as *Unconditional Selection* and closely analogous to sale by auction with deferred payments. The maximum amount of land which may be acquired on this tenure is 1,280 acres, and the minimum price is 13*s*. 4*d*. per acre, payable in twenty annual instalments.

The area of land alienated annually by auction, by special sale, or upon the terms just mentioned is small. In 1912 it amounted to 20,972 acres ; in 1913 to 16,722 acres.

(2) *Conditional Purchase*. — The holdings which may be acquired on terms of conditional purchase are classified as (i) *Agricultural farms*, (ii) *Agricultural homesteads*, and (iii) *Prickly pear selections*. Holdings described as "*Free homesteads*" may be looked upon as forming a fourth class, as their acquisition is conditional upon the payment of deposit and survey fees and the expenditure of certain sums in carrying out improvements on the holding.

Land is declared available for settlement upon the tenures mentioned by notification in the *Gazette*, — the area, price and conditions being specified. Applicants must be over the age of sixteen years. If the land is open to settlement under more than one class of tenure, priority is given to the applicant for the land as an *Agricultural homestead*. In the *Land Act* 1910 provision is made for the conversion of one form of tenure into another.

The more accessible lands are as a rule reserved for settlement as *Agricultural farms*. The maximum area which will be allotted to any one applicant is 2,560 acres ; the minimum price is 10*s*. per acre. The annual rent payable is one-fortieth of the purchase price, and rent payments are credited as part of the price. Conditions as to residence and improvements are attached.

An *Agricultural homestead* is an area not exceeding 320 acres which may be acquired in the first place upon a ten years' lease at a rent of 3*d*. per acre, with residence as a condition. The purchase price is 2*s*. 6*d*. per acre and rent payments are regarded as instalments of the price. A *Prickly pear selection* is a holding not exceeding 2,560 acres held upon condition that all prickly pear upon it be destroyed in a prescribed period. The purchase price is published in the notification of the land for settlement. During the prescribed period the rent is nominal. Residence may be made a condition of the lease. The maximum area which may be acquired as a *Free homestead* is 160 acres. The preliminary period of lease is five years, during which the occupier must reside upon the holding and fence it, or effect improvements upon it equal in value to fencing.

The table which follows shows the total areas for which applications for holdings were accepted for the four years ending 1913.

TABLE II. — *Conditional Purchases* (*Applications Approved*).

Year	Agricultural Farms		Agricultural Homesteads		Prickly Pear Selections		Total	
	Number	Area	Number	Area	Number	Area	Number	Area
		Acres		Acres		Acres		Acres
1910 . . .	1,733	628,222	67	14,778	920	1,308,170	2,720	1,951,170
1911 . . .	2,046	714,733	30	5,814	806	1,020,615	2,882	1,741,162
1912 . . .	1,717	614,269	18	3,771	544	628,614	2,279	1,246,654
1913 . . .	1,477	527,461	24	3,934	548	556,749	2,049	1,078,144

During 1913, in addition to the above, 13 applications for *Free homesteads* were approved for a total area of 2,078 acres.

(3) *Leases and Licences*. — Crown lands may be occupied for varying terms and upon varying conditions upon the following tenures : (i) *Grazing*

homesteads and *Grazing farm Leases*, (ii) *Occupation Licences*, (iii) *Pastoral Leases*, (iv) *Special Leases and Licences*, (v) *Perpetual Leases*.

It will be sufficient to refer briefly to the conditions governing the more important of these tenures.

Grazing homesteads and farms may in no case exceed an area of 60,000 acres and the maximum term of lease is 28 years. In the case of grazing homesteads residence is insisted upon for the first five years and during that time the holding may not be assigned or transferred and may not be mortgaged except to the Agricultural Bank. Land which is open to settlement as homesteads is open to settlement as grazing farms, but for fifty-six days after notification it is open to homestead settlement only. Thereafter it may be leased as farms and an applicant may obtain priority by offering, for the first seven years, a rent higher than the notified one.

Particulars of the leases granted for grazing farms and homesteads are shown below.

TABLE III. — *Grazing Farm and Homestead Leases.*

Year	Grazing Farms		Grazing Homesteads		Total	
	Number	Area	Number	Area	Number	Area
		Acres		Acres		Acres
1910	182	1,406,087	243	2,477,743	426	(1) 3,889,154
1911	161	1,762,406	253	2,726,306	414	4,488,712
1912	223	1.834,920	348	3,860,887	571	5,695,807
1913	230	2,681,948	317	3,698,600	547	6,380,548

(1) This total includes 5,324 acres in holdings known as Scrub Selections. In the *Land Act* 1910 no provision is made for holdings of this type.

Pastoral Leases are all now deemed to be held under the *Land Act* 1910. Such leases may not exceed a term of thirty years. The annual rent per square mile for the first ten years must be notified in the *Gazette* or must be determined by offering the lease at auction. If the value of the lease should be enhanced by the development of public works or by the finding of minerals on or near the holding, the rent may be redetermined.

The table which follows shows the total areas occupied upon pastoral lease under the various acts which are now consolidated in the *Land Act* 1910.

TABLE IV. — *Pastoral Leases under Various Acts.*

Particulars	Area in square miles			
	1910	1911	1912	1913
Pastoral Leases Act 1869	890	—	—	—
Crown Lands Act 1884	11,710	—	—	—
Land Act 1897	86	—	—	—
Pastoral Leases Act 1900	21,739	—	—	—
Pastoral Holdings Act 1901	500	—	—	—
Land Act 1902	305,924	—	—	—
Land Act 1910	—	346,637	354,843	357,615
Total . . .	340,849	346,637	354,843	357,615

In addition to the tenures of which particulars are given in the two tables above there remain *Occupation Licences* and *Special Leases and Licences*. The former are annual licences to occupy lands notified as open to such occupation in the *Gazette*. The rent is specified in the notification, or is the rent bid by the licensee at auction; but the rent may be raised by notice given before the 1st. September in any year. The total area held under licence, at the end of 1913 was 63,336 square miles, and the total rent being paid £42,807.

Special Leases of Crown may be granted for any term not exceeding thirty years for manufacturing, industrial, business or recreation purposes, and *Special Licences* may be issued to cut timber or work deposits of stone gravel, guano, etc.

(4) *Closer Settlement Sales, Leases and Licences.* — The *Closer Settlement Act* 1906 authorises the purchase, either by agreement or compulsorily, of private lands for settlement purposes, the amount to be spent in the acquisition of land in any one year being limited to £500,000. Where it is proposed to acquire compulsorily the whole of an estate, the owner has the right to select from it, for his own occupation, a holding of a value varying from £10,000 to £20,000 according to the value of the estate. The land acquired by purchase, as well as any Crown land which may be offered for closer settlement, is proclaimed open for selection as agricultural farms on a forty years' purchasing lease. The rent for the first year is equal to £10 for every £100 of the price ; no rent is required during the second, third or fourth years ; and the rent thereafter is equal to £6 6 *s.* for every £100.

The particulars of closer settlement operations up to the end of 1913 are as follows: Number of estates acquired 29; Total area acquired 664,363 acres; Total amount of purchase money £1,713,165; Total area selected for settlement 543,788 acres; Total amount of rent paid £972,395; Amount of rent in arrears £12,841.

In addition to the closer settlement operations just mentioned provision is made under certain acts (1) of 1901 to 1905 (repealed in part by the *Land Act* 1909 which was in turn repealed by the *Land Act* 1910) for the settlement upon agricultural homesteads of groups of settlers who desire to settle in the same locality. Advances not exceeding £80 in each case may be made to any or all of the members of a group settlement for the purpose of buying tools, rations, stock and poultry. Up to the end of 1913 a total area of 184,044 acres valued at £107,630 had been allotted to settlers who were members of groups.

(5) *Mining Leases and Licences.* — The total area occupied for various purposes under leases and licences issued by the Mines Department, was, at the end of 1913, as follows: Gold mining 5,915 acres; Mining for other minerals 34,711 acres; For other purposes (miners' homesteads, etc.) 245,340 acres: Total 285,966 acres.

§ 4. Statistics of alienation and occupation of Crown lands.

The total area of the state of Queensland is 429,120,000 acres, of which on 31st. December, 1913, about one twenty-seventh — 16,041,763 acres — was alienated absolutely; one forty-third was in process of alienation; three-quarters was occupied under lease or licence; and the remainder consisted of roads, reserves, etc., or was unoccupied.

The particulars at the end of each year from 1910 to 1913 are shown in the following table:

(1) *The Special Agricultural Selections Acts.*

TABLE V. — *Alienation and Occupation of Crown Lands.*

Particulars	1910	1911	1912	1913
	Acres	*Acres*	*Acres*	*Acres*
1. *Alienated absolutely:*				
By Purchase	15,377,626	15,626,173	15,790,907	15,956,663
Without Payment	82,726	83,013	83,295	85,100
Total . . .	15,460,352	15,709,186	15,874,202	16,041,763
2. *In Process of Alienation.*	7,971,342	9,025,049	9,577,037	10,039,255
3. *Occupied under Leases and Licences:*				
Pastoral Runs	218,142,640	222,158,880	227,410,480	228,873,480
Occupation Licences	37,834,960	43,478,880	42,465,360	40,535,160
Grazing Farms and Homesteads	38,460,439	42,130,631	47,179,483	52,251,784
Scrub Selections	235,150	234,435	233,436	216,438
Leases (Special Purposes) . .	57,782	45,000	88,147	107,707
Under Mines Department . .	187,158	140,021	203,059	310,966
Perpetual Lease Selections .	—	18,089	35,179	42,363
Total . . .	294,918,129	308,205,936	317,615,144	322,337,898
4. *Roads and Reserves.* . .	—	14,828,256	15,371,446	15,473,444
5. *Unoccupied*	110,870,177	81,351,573	70,682,171	65,227,640

The total area open for settlement (as distinguished from occupation for purely pastoral or for special purposes) at the beginning of 1913 was 8,774,987 acres, and the area declared open during the year was 11,205,132 acres ; while the area withdrawn was 1,465,788 acres. The area allotted during the year was 7,500,595 acres.

We are able to give in conclusion the summary figures relating to alienation and occupation at the end of 1914.

TABLE VI. — *Alienation and Occupation* 1914.

Particulars	Area	Percentage of Total Area of State
	Acres	
Alienated Absolutely	16,244,541	3.79
In Process of Alienation	10,586,914	2.47
Occupied under Leases and Licences	331,499,708	77.25
Total Area in Occupancy . . .	358,331,163	83.51
Area Unoccupied	70,788,837	16.49
Total Area of State . . .	429,120,000	100.00

FRANCE.

RECENT MEASURES FOR THE ORGANISATION OF AGRICULTURE.

SOURCES:

DECRETS DES 2 ET 9 FÉVRIER 1916 (*Decrees of February 2nd. and 9th.*, 1916) "Journal Officiel," February 3rd. and 10th., 1916.

BULLETIN DE L'UNION CENTRAL DES SYNDICATS DES AGRICULTEURS DE FRANCE (*Bulletin of the Central Union of the Agricultural Syndicates of France*) February-March, 1916.

In its issues of February 3rd., 4th, and 10th. the *Journal officiel* published the text of a decree promulgated by the Minister of Agriculture, which provides for the formation of Communal Agricultural Committees (*Comités communaux d'action agricole*) and of Cantonal Agricultural Organisation Committees and defines the relation of these new bodies to the agricultural syndicates.

On the other hand, there has been laid before the Chamber of Deputies a bill for the compulsory cultivation of certain kinds of land which has been allowed to go out of cultivation.

Two essential differences between the decree and the bill are to be noted:

1. Except as regards the formation of communal or cantonal committes, the decree is in no wise compulsory; every farmer, whether man or woman, is at liberty to avail himself of it or not. Its object is merely to place professional bodies at the disposal of farmers who experience difficulties in the cultivation of their land, in order to assist them in their undertakings, and if necessary, on application, to facilitate their farming operations. The bill, on the contrary, will be imperative, but it deals with such cult vators as shall have wilfully and persistently refused to turn their land to account, in spite of the assistance that would be given them by the Communal Agricultural Committees.

2. The decree is of immediate application: the Communal Committees of which it speaks had to be nominated in February. The bill must be laid before Parliamentary Committees which are free to amend it. It will be subsequently discussed by the Chamber of Deputies and then by the Senate. If it is passed, it is impossible to foresee the date at which it can be put into force.

It will, therefore, be understood that we now speak only of the decree. The object of the latter has been very clearly set forth in a Report made by the Minister of Agriculture to the President of the Republic. " The exigences of the war, " says the Minister, " impose the greatest sacrifices upon agriculture, and it is the duty of the Public Authorities to discover and apply every means for reconciling the more important interests of the Army with those of the cultivation of the soil.

" The difficulties of cultivation continue to increase (with the calling out of each class and of a large number of auxiliaries) and the entire abandonment of very many holdings would be inevitable, were not assistance given to the farmers for the work of the spring season which is now beginning. Urgent measures are, therefore, necessary everywhere, and they must be taken without delay. In order, however, to instil confidence into the farmers, it is requisite both to direct and protect them. The best means of reassuring the cultivators appeared to be to mobilise, in their turn, all those who remain on the land, placing at their head chiefs who inspire confidence from their professional capacity and, at the same time, possess sufficient authority to make themselves listened to, There remain, fortunately, in each commune, old men whose competence is undeniable, and who enjoy the respect of all. It seems certain that by appealing to the patriotism of these veterans and to their love of the soil, efficient and absolutely disinterested help will be obtained from them. Their energetic action, if understood and seconded, with conviction, by the Government, and especially by the military authorities, can restore life everywhere both in the war zone and the interior and insure a maximum return at the next harvest. "

The report accordingly advised " the creation of a permanent body composed of the pick of the farmers belonging to each rural commune, which body shall at the same time be the centre of action and regulate the general activity. "

The decree promulgated on February 2nd., 1916, by the President of the Republic provides for the carrying out of these suggestions. Its provisions are as follows :

" 1. — There shall be established in each rural commune for the duration of the war, and under the title of the Agricultural Committee (*Comité d'action agricole*) a permanent Committee consisting of farmers and elected by all the the farmers of the Commune.

" Women managing a farm shall have a vote and may be members of the Committee.

" This Committee shall consist of 5 members in the case of communes of less than 500 inhabitants, of 7 members in that of communes of from 500 to 2000 inhabitants, and of 9 members in the case of all other communes.

" 2. — The Committee shall be entrusted with the general organisation of farming operations and with ensuring the cultivation of all the land under the following conditions :

" (1) Its mission shall be to place itself at the disposal of the farmers, in order to give them advice and support, to point out to them the means of

procuring, and to assist them in acquiring, manures, seeds, draught animals, machines, etc., and, finally, to put them in communication with agricultural mutual credit institutions which are able to advance the money necessary for their undertakings.

" (2) It shall act as the intermediary for submitting the requests, complaints and petitions that they wish to lay before the military and civil authorities, either directly, or through the medium of the Cantonal Committee to be described hereafter.

" (3) It shall have power, on the request of mobilised or even unmobilised, farmers, to undertake, as an unpaid agent, the direction of the cultivation of such lands as they may be unable to cultivate any longer.

" 3 — The Committees of several communes may agree together and combine in order jointly to direct the agricultural operations of these communes, as if they formed a single committee.

" 4. — The agricultural associations may in like manner arrange amongst themselves for the formation of groups which shall place themselves in touch with the Committees for the purposes of affording them assistance, and support and, if necessary, take their place.

" 5. — The Committee shall be presided over by the mayor of the commune, and with him shall be associated a Vice-President created by the Committee.

" When several committees have decided to unite, they shall select the commune which is to be the head-quarters of the group and the mayor of the commune chosen shall act as President.

" 6. — The members of the Committees undertaking the direction of the cultivation shall act as the agents of the farmers themselves, if the latter shall have entrusted the cultivation of their land to the Committee. The pecuniary liability for the expenses incurred shall devolve upon the farmers.

" 7. — Within an interval of a fortnight from the date of the present decree, the mayors of the rural communes, with the help of two municipal councillors, shall without any formality, draw up a list of the farmers of the commune ; any whose names have been omitted shall be able to claim their insertion after the list has been drawn up.

" 8. — There shall be instituted as well as the Communal Agricultural Committees, a Cantonal Committee (styled Agricultural Organisation Committee), which, without interfering in the conduct of the cultural operations carried out by the said Committees, shall have as its sole function that of advising them and acting as an intermediary between them and the military and civil authorities by laying before the authorities and supporting the complaints and petitions of a general character relating to the cultivation of the soil, to labour, purchases or military requisitions, hindrances to cultivation, the payment of compensation, transport, credit, etc.

" Each commune shall be represented at the Cantonal Committee by a Delegate of the Communal Committee."

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* *

As the time was short and the spring season had already begun, it was necessary, in order to give the Committees their maximum degree of efficacy, that they should set to work at once, and it was decided that the members of these committees should be nominated, at latest, on February 23rd., 1916.

A large number of the prefects, however, considered that it was impossible to carry out the scheme in so short a time; they objected that it would be impossible to draw up the lists of the farmers on account of the excess of work at the *Mairies*, the absence of a large number of the mayors and of the secretaries of the *Mairies*.

The Minister of Agriculture was of opinion that it was better to do something that was imperfect than to wait till it was too late to act, and as urgency thus took precedence of every thing, it was decided, in order to simplify the method of nominating the Committees, to modify the procedure by forming the committees, to some extent, in an automatic manner. He entrusted the nomination to the members of the municipal council with which should be associated the most authoritative representatives of agriculture residing in the commune.

No other change has been made in the decree. The number of members remains the same, it includes the mayor of the commune, who remains President of the Committee, with a Vice-President nominated by the municipal council and the members of agricultural associations.

Nor has anything has been altered in the organisation of the Cantonal Committee which will be presided over by the mayor of the chief town of the canton.

In conclusion, it remains understood that women placed at the head of an agricultural undertaking shall have the same rights as men, many of them by their courage and competence having deserved foremost places in the Committees.

In consequence, the following new decree was promulgated on February 9th., 1916

" 1. — Section 1 of the decree of February 2nd., 1916, is amended as follows :

" For the duration of the war, there shall be formed in each rural commune, under the title of Agricultural Committee, a permanent committee consisting of 5 members in the case of communes of than less 500 inhabitants, of 7 members in that of communes from 500 to 2,000 inhabitants, and of 9 members in that of all other communes.

" The members of this Committee shall be nominated by the municipal council, to which shall be added three farmers, men or women, chosen by the council from amongst the officers of such Agricultural Associations as exist, or in default of such, the members of these Associations residing in the commune, or should there be none, from amongst the well-known farmers.

" They shall be elected by an absolute majority from amongst the farmers, men or women, and may be chosen from outside the municipal council and the three members associated therewith. "

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* *

The favourable reception accorded to these decrees by the farmers is shown by the fact that the Syndical Chamber of the Central Union of Agricultural Syndicates at its meeting of February 7th., unanimously decided to invite the farmers and all the affiliated syndicates to take part in the formation of the Communal Agricultural Committees. It appeared to the Syndical Chamber that these committees constitute, in fact, true independent syndical agricultural associations and are called upon to play the most useful part in view of agricultural mobilisation, by serving as intermediaries between the farmers and the authorities for the purpose of obtaining labour, teams, means of transport, credit, etc., and in a general manner procuring assistance to increase national agricultural production and remedies against allowing the land to go out of cultivation.

On its side, the Permanent and Mixed Committee of the Agricultural and Legislative Sections of the " Société des Agriculteurs de France " passed the following resolution on February 9th., 1916:

" In view of the decree of February 2nd., 1916, establishing in each rural commune an Agricultural Committee elected by the farmers themselves, as well as Cantonal Agricultural Organisation Committees ;

" Seeing that the provisions of this decree suffice to solve the difficulties of the present time and assure, as far as possible, the cultivation of the land with the consent of the usual cultivator ;

" Seeing that this decree has the special advantage of satisfying the essential principle of professional organisation and of forming, in some measure, in each canton a syndical body analogous to the professional organisation provided by the law of 1884 ;

" The Permanent and Mixed Committee of the Agricultural and Legislative Sections approving formally of the provisions of the above-mentioned decree and insisting that the character of professional selection of the Communal Agricultural Committees be maintained :

" Enjoins all interested persons to co-operate in the application of the decree....

" It further calls the special attention of agricultural associations, and particularly of those affiliated to the ' Société des Agriculteurs de France, ' to the provisions of Section 4 of the decree, in the terms of which, *they can agree to form groups which shall place themselves in touch with the committees for the purpose of affording them assistance and support, and, if necessary, take their place.* "

NEW ZEALAND.

THE SYSTEM OF LAND REGISTRATION IN NEW ZEALAND.

By G. G. Bridges, *Registrar General of Land.*

For the purposes of this article "Land Registration" is understood to mean the system by which the ownership of land is legally evidenced and dealings therewith effected or recorded.

The Land Transfer Act embodies the only system of land registration in the strict sense, but so much land is still held and dealt with under what is known as the old conveyancing system that a brief reference to this will not be out of place.

§ 1. The conveyancing system and property law act.

On the Proclamation of the Queen's sovereignty over New Zealand in 1840, the laws of England, so far as applicable to the circumstances of the Colony, came into force therein. These included the laws relating to real property and conveyancing, which, until the introduction of the Land Transfer system at a later date, applied to all dealings with land.

These laws were modified in some particulars by "An Ordinance to facilitate the transfer of Real Property and to simplify the law relating thereto" (commonly known as the "Conveyancing Ordinance") passed by the Legislative Council in 1842, and now, with further amendments, embodied in the Property Law Act, 1908. The matters dealt with in this statute come more within the province of conveyancing than of registration. Among other things it simplified the old conveyancing forms. The original ordinance substituted a short form of a conveyance in fee simple for the lease and release then necessary under the English law, and later amendments supplied, as an alternative to the usual long mortgage deed, a short form of statutory mortgage, in which the usual covenants, conditions and powers, as set out in the schedule to the Act, are declared to be implied, also a short form of discharge of mortgage by endorsement of a receipt for the money which is declared to operate as a reconveyance, and short forms for endorsement of increase or reduction of the mortgage debt or the rate

of interest, and of shortening, renewal or extension of the term or currency These forms (excepting the conveyance) are practically identical with those prescribed by the Land Transfer Act. They are of advantage to mortgagors by frequently saving the cost of a new deed.

Another ordinance was passed by the Legislative Council in 1841, intituled "An Ordinance to provide for the Registration of Deeds and Instruments affecting Real Property," which is now embodied in the Deeds Registration Act, 1908. This provides for the registration of all deeds and instruments affecting land which is not subject to the provisions of the Land Transfer Act. For the purposes of this Act there is in each District a Deeds Register Office and a Registrar of Deeds. Indexes to all land in the District are kept, under the headings of the name of town or other subdivision and number of block or allotment. Instruments received for registration are numbered consecutively and entered in the Index against the land affected, stating the number, date and nature of the instrument and names of the parties. They are then copied into record books, and afterwards returned to the persons by whom they were presented for registration, docketed with the registration number and date and reference to the Index.

The Index and Record Books are open to public inspection during office hours on payment of a small fee.

The object of registration it to give notice and to secure priority. Section 35 of the Act provided that every deed or contract authorised by the Act to be registered "shall so far as regards any land to be affected thereby be void as against any person claiming for valuable consideration under any subsequent deed or contract duly registered unless the earlier deed or contract was registered before the registration of the subsequent deed or contract."

Instruments registered under this system do not derive any additional validity from registration, nor is the Department in any way responsible for their accuracy, beyond seeing that the plan and description of the land are sufficient to identify it clearly in the Index. The deeds constitute the title, and a purchaser's security depends upon the legal accuracy of the title deeds, and the skill and care brought to bear upon the examination of them by his legal adviser.

A considerable area of land, principally in the earlier settled districts, is still held and dealt with under this system. It does not apply to any land alienated from the Crown since 1870, and no fresh land can be brought under it. The area is also constantly being diminished by land being brought under the Land Transfer Act. It is a common condition of sale of such land that the vendor shall procure a Land Transfer Act title. The system is therefore somewhat obsolete and in gradual process of becoming extinct.

§ 2. The Land Transfer System.

The modern system, which applies to all land alienated from the Crown since 1870, and under which the remaining land is being gradually brought, is known as the Land Transfer system. This was first introduced into South Australia in 1858 by Sir Robert Torrens, after whom it is sometimes called the "Torrens System," and was subsequently adopted by the other Australian states, Tasmania and New Zealand. It was brought into operation in New Zealand by the Land Transfer Act, 1870, which has since gone through various amendments and consolidations, and has recently been re-enacted as the Land Transfer Act, 1915. The special feature of this system is registration of *title* as distinguished from the mere registration of *instruments*, or, in other words, the substitution of *title by registration* for *title by deed*.

The Act provides for the appointment of a Registrar General of Land, and of a District Land Registrar and one or more Assistant Land Registrars and Examiners of Titles for each District.

It may here be mentioned that for administrative purposes New Zealand is divided into ten districts, corresponding with the former provinces, and still called Provincial Districts. In each of these districts there is an office called the Land and Deeds Registry, where all dealings with land in the District are registered. The Deeds Registration and Land Transfer systems are worked side by side in the same offices, and in each district one officer fills the two positions of Registrar of Deeds and District Land Registrar.

The Land Transfer Act applies to all land alienated from the Crown since 1870, all land included in any order under the Native Land Acts vesting such land in any person in freehold tenure, and all land vested in any any person in fee simple by virtue of any Act of the Legislature, besides land which has been brought under the Act on the application of the proprietor.

When the owner of land under the old system desires to obtain a title under the Land Transfer Act, he makes application to the District Land Registrar on the prescribed form. (1) This includes a statement of his ownership, the description and value of the land, particulars of all outstanding charges or leases or other interests to which the land is subject, the names of the persons in occupation and of the adjoining owners and occupiers, and a schedule of all the title deeds in his possession, which are also handed in. This is verified by statutory Declaration, and a formal request is added that the land may be brought under the provisions of the Act. In the absence of any special direction the title is issued in the name of the applicant. He may, however, direct it to be issued in the name of any other

(1) *Form* 3. (See Appendix for the various Forms referred to in the text.)

person, and this is frequently done. Thus the bringing of the land under the Act and the transfer of it to a purchaser may be effected by one operation, without any extra cost except the stamp duty which is payable on every sale by whatever means it may be effected. A plan of the land by a Licensed Surveyor accompanies every application. Section 20 of the Act enumerated the classes of persons competent to make application or whose concurrence or consent is necessary.

The application is referred by the Registrar to the Examiner of Titles, whose special function it is to investigate and report upon the title, and who examines the deeds handed in and also inspects the Deeds Registry Index for any others that may be registered. The Registrar and Examiner in consultation decide whether or not to accept the title, and if so, whether or not subject to any requisitions. When all requisitions have been complied with and the title is considered satisfactory, notice of the application is published in the the official *Gazette* and in a local newspaper prescribing a term, usually a month, at the expiry of which the land will be brought under the Act. During the period of advertisement any person claiming an interest in the land may lodge a caveat (1) forbidding its being brought under the Act. This prohibits the Registrar from proceeding with the application for a period of 3 months, during which the caveator may take proceedings to establish his claim. The Registrar does not undertake to settle disputed questions of ownership, which can only be done by the Law Courts. The titles being carefully investigated before being accepted, caveats against applications are very few. If no caveat is lodged before the expiry of the advertised period, the Registrar proceeds to bring the land under the Act by issuing a certificate of title (2) to the applicant, or in accordance with his direction, and at the same time making an entry in the Deeds Register Index closing it against further registrations.

If when brought under the Act the land is subject to any lease, mortgage, or other encumbrance, this is noted on the certificate, and is thereafter dealt with as if it had been created under the Act.

(*i*) *Certificate of Title.*

Every registered proprietor of a freehold estate in possession in land under the Act is entitled to a Certificate of Title for the same. The certificate is issued in duplicate. One copy on parchment is given to the proprietor and the other on paper is retained in the office, the office copies being bound up in volumes and constituting the Register Book. In common language Certificate of Title is generally used to denote the parchment copy which is given to the proprietor the paper copy in the office being referred to as the Register Book.

(1) *Form* 13.
(2) *Form* 1.

There are two forms of Certificate of Title, namely, the ordinary form (1) issued when land is brought under the Act on application, or issued to a purchaser on subdivision, or by substitution, and the certificate in lieu of Crown grant (2), which is issued on the first acquisition of title from the Crown. Formerly a Crown grant under the hand of the Governor and seal of the Colony was issued, but now a warrant in schedule form is signed by the Governor directing the District Land Registrar to issue certificates of title to the persons and for the land specified.

(*ii*) *The Register Book and the Method of Registration.*

The Register Book may be described as the backbone of the whole system. In it are entered the memorials of all registered dealings and it is conclusive evidence of the title of any person named as proprietor of the land or of any estate or interest therein.

The Register Book and all registered and deposited instruments and deposited plans are open to public search on payment of prescribed fees.

As already stated, the title to land under the Act is not affected by the execution of instruments, but only by registration.

For the purpose of registration of any dealing, the appropriate form must be filled up, signed and witnessed and, if liable to duty, stamped. It s then presented at the Land Registry Office with the certificate of title. Registration is effected by noting a memorial on the certificate and on the corresponding folium of the Register Book. The memorial expresses the nature and number of the dealing, the date of registration and the names of the parties. The certificate is then returned to the transferee, mortgagee or whoever may be entitled to the custody of it. If part of the land in a certificate is transferred, the certificate is cancelled, and a new certificate is issued to the purchaser for the part transferred, and another to the proprietor for the untransferred balance. One great difference between the old and the new systems lies in the fact that under the old system every transaction added another deed to the title, while under the present there can never be more than one document of title for the same land. This saves the time and expense sometimes expended in the examination of the title on any transaction with land under the old system.

Forms of the various dealings are prescribed by the Act. These are printed and sold by the Department, but most practising solicitors have their own forms printed. There is nothing to prevent persons having the necessary skill and knowledge from preparing their own documents, but in practice it is usual to employ solicitors or land brokers specially licensed under the Act for that purpose. All usual covenants are implied in the various instruments by the Act, and provision is also made for the introduction of special covenants by the use of abbreviated expressions, so that a

(1) *Form* 1.
(2) *Form* 2.

dealing which under the old system would have necessitated a lengthy document may be effected under the Act by quite a short one.

(*iii*) *Trusts not recognised.*

The advantages of a registered, state-guaranted and indefeasible title, with simplicity in dealing, cannot be secured without sacrificing to some extent the freedom of dealing which was possible under the old system. The powers of the Registrar are entirely statutory and he is forbidden by Section 39 of the Act to register any instrument " except in the manner herein provided nor unless such instrument is in accordance with the provisions hereof. " While all ordinary transactions are provided for, there are necessarily some limitations. One of the most important of these is with regard to trusts. It is a cardinal principle of the Land Transfer system that the legal ownership only is recognised, and no instrument declaring trusts may be registered. The interests of beneficiaries are protected to the extent that trustees not having an absolute power of sale cannot bring land under the Act without their consent, and when the land is under the Act they can enter caveats which will prevent any dealings from being registered without their consent. Their rights are also enforceable in the Courts; but for the purpose of dealings with third parties, the registered proprietor is deemed to be the absolute owner.

(*iv*) *Caveats.*

The above principle precludes the registration of equitable as distinguished from purely legal estates. A mere contract or agreement for sale, lease, etc. cannot therefore be registered.

Such interests may, however, be protected by a caveat. (1) Caveats against application to bring land under the Act have already been mentioned. Caveats against dealings may be lodged by " any person (*a*) claiming to be entitled to or to be beneficially interested in any land estate or interest under the Act by virtue of any unregistered Agreement or other instrument or transmission or of any trust expressed or implied or (*b*) transferring any estate or interest under the Act to any other person to be held in trust. " (2)

Notice of the caveat is given to the proprietor of the land against whose title it has been lodged, who may summon the caveator to attend before the Supreme Court to show cause why it should not be removed.

The consent of the caveator may be given to the registration of any particular dealing expressed to be made subject to his rights. Failing

(1) *Form* 14.
(2) Sec. 147.

such consent, the dealing may be presented for registration and notice given to the caveator. The caveat will then lapse unless within 14 days the caveator takes proceedings to establish his rights (1). Discretionary power is also given to the Registrar (2) to enter caveats for the protection of persons under disability or absent from the Dominion, or on behalf of the Crown, or to prevent dealings with land in any case in which an error is found to have been made in any certificate of title, or for the prevention of fraud or improper dealing.

Caveats by the Registrar, or by persons claiming under a will or settlement, or for the protection of any trust, do not lapse by notice given, but can only be removed by order of the Supreme Court.

§ 3. Registration of dealings with land.

The dealings with land which may be registered under the Act fall under the three headings of Transfers, Leases and Mortgages.

(*i*) *Transfers.*

By a transfer (3) the whole or part of the land in any certificate of title, or any lesser estate, such as a life estate or an undivided share, or a right of way or other easement, may be transferred. A registered lease or mortgage may be similarly transferred, although for such cases an alternative form is provided by endorsement on the lease or mortgage (4).

One copy only of a transfer is usually signed, which is retained at the Registry, the transferee receiving the document of title with memorial endorsed vesting the estate in himself.

(*ii*) *Leases.*

The prescribed form of Lease (5) is merely a skeleton form, the special covenants which constitute the material portion being inserted by the solicitors to suit the circumstances of the case.

The Act provides that a right for or covenant by the lessee to purchase the land may be stipulated in a lease and shall be binding upon the lessor. This forms an exception to the general rule against registering equitable interests. In every lease there is an implied covenant by the lessee to pay

(1) Sec. 155.
(2) Sec. 184.
(3) *Form* 4.
(4) *Form* 5.
(5) *Form* 6.

the rent and rates and taxes and to keep the property in repair, and implied power for the lessor to enter and view the state of repair and to re-enter and take possession on default in payment of rent or observance of covenants. A lease is required to be executed in duplicate, one copy for the Registry and one for the lessee. A triplicate for the lessor is optional.

A registered lease may be transferred or mortgaged, or the land may be sub-leased. Such dealings are noted by memorial on the office and lessor's copies of the lease and in the Register Book, but not on the certificate of title. It may also be determined before the expiry of the term by endorsement of the word " surrendered, " signed by the lessor and lessee and any other persons having any registered interest. It may also be determined by re-entry on default in payment of rent or observance of covenants. On proof to the satisfaction of the Registrar of re-entry and actual recovery of possession by the lessor, an entry is made in the Register Book and on the certificate of title to that effect, notice being first given to the lessee, either by personal service or advertisement in default of service.

(*iii*) *Mortgages.*

A mortgage under the Act does not, as under the old law, convey the legal estate to the mortgagee, but operates only as a charge with a power of sale on default.

Two alternative forms are provided for ordinary mortgages to secure re-payment of loans (1), and there is also a form of encumbrance (2) to secure other payments, such as annuities, which may be charged upon land. As in the case of leases these are only skeleton forms, the special covenants being inserted according to circumstances.

The mortgage is executed in duplicate, one copy for the office and one for the mortgagee, who also is entitled to hold the certificate of title during the currency of the mortgage.

Covenants are implied by the Act on the part of the mortgagor to pay the principal sum and interest, to keep the buildings on the property in repair, and to insure, and powers for the mortgagee on default to enter into possession and to sell and transfer the mortgagor's estate. The covenants are set out at length in a schedule to the Act. It is open to the parties to negative or modify them by express statement in the mortgage.

Provision is made for varying the terms or conditions of any mortgage, and so saving the expense of a new one, by increasing or reducing the principal sum, or the rate of interest, or by shortening, extending or renewing the term or currency. Short forms are provided for these purposes for registration. (3)

(1) *Forms* 7 and 8.
(2) *Form* 9.
(3) *Forms* 10, 11 and 12.

A mortgage is discharged by a receipt for the amount secured, signed by the mortgagee and usually endorsed on his copy of the mortgage, which is retained in the office, the discharge being noted on the title.

The mortgage may be sub-mortgaged, and in that case the consent of the sub-mortgagee is necessary before any variation of terms or discharge can be registered.

§ 4. Transmission.

The foregoing provisions provide for registering the various dealings with land which may be entered into by the proprietors. There are certain cases, however, in which the ownership of property passes by operation of law, and these are dealt with under the head of Transmission. For the purposes of the Act, " Transmission " is defined as " the acquirement of title to an estate or interest consequent on the death or bankruptcy of a registered proprietor, or as his executor or administrator or as trustee under a will or settlement, or by virtue of appointment or succession to any office. " In all these cases there will be some documentary evidence establishing the right of the claimant to the estate or interest claimed, but which is not capable of being registered as an instrument under the Act. A written application to be registered as proprietor is therefore made to the Registrar by the person claiming to be entitled, verified by a Statutory Declaration and accompanied by the documentary proof. If the Registrar is satisfied with the proofs, the transmission is registered by making an entry on the title that the estate or interest of the present registered proprietor has become vested in the claimant. As already stated in referring to trusts, the person so registered as proprietor holds the estate or interest transmitted subject to all equities affecting the same, but for the purpose of any dealing therewith is deemed to be the absolute proprietor thereof. (1)

§ 5. Attestation of instruments.

The validity of titles under the Land Transfer Act being guaranteed by the State, precautions are necessary to ensure the genuineness of all instruments accepted for registration. The Act requires every instrument to be signed by the registered proprietor and attested by at least one witness. If the witness is not known to the Registrar, and the latter thinks it necessary, he may require the execution to be proved by the attesting witness attending before himself or a Notary Public, Justice of the Peace or Solicitor, and answering certain questions as to his knowledge of the person signing and his having seen him voluntarily sign the instrument. In

(1) Sec 125.

ordinary practice, when the instrument is executed within the Dominion, it is attested by a Solicitor, or Justice of the Peace, or other person of official standing, and nothing more is required. Corporations execute by affixing their official or common seal, which is declared by the Act to be sufficient proof of authenticity. More formality is required when the instrument is executed out of the Dominion. If within the British Dominions, it is governed by the Imperial Act known as the Statutory Declarations Act 1835, which requires the attesting witness to make a statutory declaration before a Notary Public who affixes a certificate under his seal. If in any foreign country, it must be attested by the British Minister or Consul under his seal of office, or by a witness who makes a declaration before the Minister or Consul.

Any instrument may be executed on behalf of the proprietor by an Attorney duly appointed. The Power of Attorney must be executed with the same formality as an instrument for registration, and the original or a copy must be deposited in the Registry Office of the District in which the instrument is to be registered.

§ 6. Surveys.

In a system which guarantees not only the security of the title but also the accuracy of the boundaries as described in the certificate of title, surveys form an important feature.

All land in New in Zealand before being alienated by the Crown is divided into townships, districts or other subdivisions, and these are surveyed into town, suburban or rural allotments or blocks which are all numbered. In each of the Land Districts, which correspond with the Registration Districts, there is a branch of the Government Survey Department, were the record maps of all these subdivisions are deposited. These form the basis of the description of land for all purposes of dealings. As settlement progresses the original Government allotments or blocks become further subdivided by private owners. This is done at the owner's expense by practising surveyors holding a Government license. The plans of these subdivisions are examined and approved by the Chief Surveyor of the District, and are then deposited in the Land Transfer Office, and form the immediate basis of the certificates of title issued on transfer to purchasers. These maps and plans are open to public inspection, so that it is always possible to locate the land described in any certificate of title on the Government Map, or on the other hand having found the land on the map, to obtain from the land index in the Registry Office a reference to the volume and folio of the Register Book.

§ 7. The question of title.

The most essential element in the whole system is the indefeasibility of the title of a purchaser for value from a registered proprietor, except in the case of actual fraud on the part of such purchaser. There are one or two exceptions, such as the wrongful inclusion of road or public reserves or of other land by misdescription of boundaries, which are specially provided for, and there have been some important decisions in the Courts on the application of the principle to particular cases, which cannot be dealt with here. The general principle is that the estate of the registered proprietor is paramount, and is free from all charges or encumbrances except such as are notified in the Register.

It follows from this that cases must sometimes occur, either through errors or omissions on the part of the registration officers, or through mistake or fraud on the part of third parties, in which innocent persons may sustain loss or damage, or may be deprived of their property, and be debarred from bringing an action for recovery of possession. The Act provides that such persons may bring an action against the Registrar General as nominal defendant for recovery of damages. To meet such claims an Assurance Fund is maintained by a payment of a halfpenny in the pound on the value of the land when first brought under the Act.

As previously stated, the powers of the Registrar are entirely statutory and no dealings with land under the Act can be effected except in the manner and in the forms prescribed. There are also other Statutes which place conditions or restrictions upon the sub-division or other dealings with land, and impose duties or prohibitions upon the Registrar with regard to them. Considerable responsibiliy is thus placed upon the Registrar in dealing with the various instruments submitted for registration, and his decisions may not always meet with acceptance. A right of appeal is therefore provided. Any person deeming himself aggrieved may require the Registrar to set forth in writing the grounds of his decision and may summon him to appear before the Supreme Court to substantiate such grounds; or he may in the first instance refer the matter to the Registrar General of Land, whose decision will be binding upon the Registrar, but will be subject to the like appeal to the Supreme Court.

§ 8. Fees.

Regulations prescribing the fees to be charged, and regulating the practice and conduct of business, are made by Order in Council under powers given by the Act. All fees are paid by stamps affixed to the documents.

The principal charges are : — For bringing land under the Act, £1 when the value exceeds £300 with a sliding scale for smaller values, also

on lodging the application 5*s*., for advertising £1, and contribution to the Assurance Fund a halfpenny in the pound on the value of the land; for registering any Transfer, Mortgage, Lease, or other instrument, or Transmission, entering Caveat, or depositing Power of Attorney or other instrument, 10*s*.; for registering Transfer or Surrender of Lease, Transfer or Discharge of Mortgage, or Memorandum altering terms of mortgage, 5*s*.; for every certificate of title £ 1; for search 2*s*.

***

It has only been possible within the limits of this article to outline the leading features of the system of registration of title in operation in New Zealand. For more detailed information recourse must be had to the statutes and regulations and published works on the subject, among which the following may be mentioned:

THE LAND TRANSFER ACT, 1915, WITH REGULATIONS AND INDEX. Government Printer: Wellington, N. Z.

THE DEEDS REGISTRATION ACT, 1908. Government Printer: Wellington, N. Z.

THE PROPERTY LAW ACT, 1908. Government Printer: Wellington, N. Z.

HUTCHEN (DAVID): The Land Transfer Act, with Introduction, Notes and Forms. Whitcombe & Tombs Limited: Wellington, N. Z., and London.

HOGG (JAMES EDWARD): The Australian Torrens System: being a treatise on the system of Land Transfer and registration of title in the six States of the Commonwealth of Australia, New Zealand, Fiji and British New Guinea, with text of the Statutes and Historical account of the growth of the system. William Clowes & Sons, Limited: London.

APPENDIX — FORMS REFERRED TO IN THE TEXT.

Form 1.

New [*Royal Arms.*] Zealand.

Reference { Vol. , folio . Register-book:
Transfer No. Vol. , folio .

CERTIFICATE OF TITLE UNDER LAND TRANSFER ACT.

THIS certificate, dated the day of ,one thousand nine hundred and , under the hand and seal of the District Land Registrar of the

Land Registration District of , witnesses that is seised of an estate in fee-simple (subject to such reservations, restrictions, incumbrances, liens, and interests as are notified by memorial underwritten or indorsed hereon; subject also to any existing right of the Crown to take and lay off roads under the provisions of any Act of the General Assembly of New Zealand) in the land hereinafter described, as the same is delineated by the plan hereon, bordered , be the several admeasurements a little more or less, that is to say: All that parcel of land containing .

District Land Registrar.

Form 2.

New [*Royal Arms.*] Zealand.

Reference { Warrant No. . Register-book:
P. R. Folio . Vol. , folio .

CERTIFICATE OF TITLE UNDER LAND TRANSFER ACT.

THIS certificate, dated the day of , one thousand nine hundred and , under the hand and seal of the District Land Registrar of the Land Registration District of , being a certificate in lieu of grant under warrant of His Excellency the Governor in exercise of the powers enabling him in that behalf, witnesseth that is seised of an estate in fee-simple (subject to such reservations, restrictions, incumbrances, liens and interests as are notified by memorial underwritten or indorsed hereon; subject also to any existing right of the Crown to take and lay off roads under any Act of the General Assembly of New Zealand) in the land hereinafter described, as the same is delineated by the plan hereon, bordered , be the several admeasurements a little more or less, which said land is in the said warrant expressed to have been originally acquired by as from the day of , one thousand hundred under , that is to say: All that parcel of land containing

District Land Registrar.

Form 3.

APPLICATION TO BRING LAND UNDER THE ACT.

I. A. B., of , do declare that I am [*or* on behalf of , of , that he is] seised of an estate of freehold [*Here state whether of inheritance or of a life estate, and whether held in trust*] in all that piece of land situated in [*Here*

state the situation], containing [*Here state the area*], be the same a little more or less (exclusive of roads intersecting the same, *if any*), with [*Here state rights of way and other privileges or easements appertaining, and set forth a sufficient description to identify the land*], which piece of land is of the value of £ and no more, and is the town allotment [*or* country section, *or* is part of the town allotment, country section, *or* reserve] originally granted to , by grant dated the day of , numbered in the plan of the District [County, *or* Township] of , as delineated on the public maps of the district deposited in the . And I do further declare that I am not aware of any mortgage, incumbrance, or claim affecting the said land, or that any person has any claim, estate, or interest in the said land, at law or in equity, in possession or in expectancy, other than is set forth and stated as follows, that is to say: [*Here state particulars of mortgages, incumbrances, dower, or other interest to which the land may be subject*]. And I further declare that there is no person in possession or occupation of the said land adversely to my estate or interest therein, and that the said land is now [*Here state name and description of occupier, or that the land is unoccupied*], and that [*Here state the names and address of owners and occupiers of lands contiguous thereto*]; and that there are no deeds or instruments of title affecting such land in my possession or under my control other than those enumerated in the Schedule hereto or at the foot hereof. And I make this solemn declaration conscientiously believing the same to be true.

Dated at this day of , 19 .

A. B.

Made and subscribed by the above-named A. B. this day of , 19 , in the presence of me,

. District Land Registrar [*or* Justice of the Peace, *or* Notary Public).

I, A. B., the above declarant, do hereby apply to have the piece of land described in the above declaration brought under the provisions of "The Land Transfer Act, 1915."

Dated at this day of , 19.

Signed by the above-named A. B. in the presence of—

C.D.,

[*Occupation and address*].

Form 4.

MEMORANDUM OF TRANSFER.

I, A. B., being registered as the proprietor of an estate [*Here state nature of the estate or interest*] (subject, however, to such incumbrances, liens, and

interests as are notified by memorandum underwritten or indorsed hereon) in all that piece of land situated in the District (County, *or* Township) of , containing [*Here state area*], be the same a little more or less (*exclusive of roads intersecting the same, if any*) [*Here state rights of way, privileges, or easements, if any, intended to be conveyed; and, if the land to be dealt with contains all that is included in an existing grant or certificate, or lease, refer thereto for description of parcels and diagrams; otherwise set forth the boundaries in chains, links, or feet, and refer to plan delineated on the margin or annexed to the instrument, or deposited in the Registry Office, and refer also to the existing grant, certificate or lease*], in consideration of the sum of £ paid to me by E. F., the receipt of which sum I hereby acknowledge, do hereby transfer to the said E. F. all my estate or interest in the said piece of land [*or a lesser estate or interest describing the same*].

In witness whereof I have hereunto subscribed my name this day of A. B.

Signed by the above-named A. B., as transferor, in the presence of—
G. H.,

[*Occupation and address*].

Form 5.

TRANSFER OF MORTGAGE, INCUMBRANCE, OR LEASE TO BE INDORSED ON ORIGINAL MORTGAGE INCUMBRANCE OR LEASE.

I, THE within-mentioned C. D., in consideration of £ , this day paid to me by X. Y., of , the receipt of which sum I do hereby acknowledge, hereby transfer to him the estate or interest in respect to which I am registered proprietor, as set forth and described in the within-written security, together with all my rights, powers, estate, and interest therein.

In witness whereof I have hereunto subscribed by name this day of .

C. D., Transferor.

Signed by the above-named C. D., as transferor, in the presence of—
E. F.,

[*Occupation and address*].

Accepted—X. Y., Transferee.

Signed by the above-named X. Y., as transferee in the presence of—
G. H.,

[*Occupation and address*].

Form 6.

MEMORANDUM OF LEASE.

I, A. B., being registered as proprietor of an estate [*Here state nature of the estate or interest*] (subject, however, to such incumbrances, liens, and interests as are notified by memorandum underwritten or indorsed hereon) in that piece of land situated in the District (County, *or* Township) of , containing [*Here state area*], be the same a little more or less (*exclusive of roads intersecting the same if any*) [*Here state rights of way, privileges, or easements, if any, intended to be conveyed. If the land to be dealt with contains all that is included in an existing grant or certificate of title, or lease, refer thereto for description and diagram, otherwise set forth the boundaries in chains, links, or feet, and refer to a plan thereof on margin of or annexed to the lease, or deposited in the Registry Office and refer also to the existing grant, certificate or, lease*], do hereby lease to E. F., of [*Here insert description*] all the said land, to be held by him the said E. F. as tenant for the space of years at the yearly rental of £ , payable [*Here insert terms of payment of rent*], subject to the following covenants, conditions, and restrictions [*Here set forth all special covenants, &c., if any*].

I, E. F., of [*Here insert description*], do hereby accept this lease of the above-described land to be held by me as tenant, and subject to the conditions, restrictions, and covenants above set forth.

Dated this day of , 19

A. B., Lessor.
E. F., Lessee.

Signed by the above-named A. B., as lessor, in the presence of —
G. H.,

[*Occupation and address*].

Signed by the above-named E. F., as lessee, in the presence of —
I. J.,

[*Occupation and address*].

Form 7.

MEMORANDUM OF MORTGAGE.

I, A. B., being registered as proprietor of an estate [*Here state nature of the estate or interest*] (subject, however, to such incumbrances, liens, and

interests as are notified by memoranda underwritten or indorsed hereon) in that piece of land situated in the District [County, *or* Township] of , containing [*Here state area*], be the same a little more or less (*exclusive of roads intersecting the same, if any*) [*Here state rights of way, privileges, or easements, if any, appertaining; and, if the land to be dealt with contains all that is included in an existing grant or certificate of title or lease, refer thereto for description of parcels and diagram; otherwise set forth the boundaries in chains, links, or feet, and refer to the plan thereof on margin of or annexed to the mortgage, or deposited in the Registry Office, and refer also to the existing grant, certificate, or lease*], in consideration of [*Here state circumstances of indebtedness, present or future, in respect of which the security is intended to be given*], do hereby covenant with the said E. F. that I will pay to him the said E. F. the sum of £ on the day of Secondly, that I will pay interest on the said sum at the rate of £ by the £ 100 in the year, by equal payments on the day of and on the day of in every year. Thirdly [*Here set forth special covenants, if any*]. And, for the better securing to the said E. F. the repayment in manner aforesaid of the said principal sum and interest, I hereby mortgage to the said E. F. all my estate and interest in the said land above described.

In witness whereof I have hereto signed my name this day of

A. B., Mortgagor.

Signed by the above-named A. B., as mortgagor, in the presence of —
G. H.,

[*Occupation and address*].

Form 8.

MEMORANDUM OF MORTGAGE.

(*a.*) Mortgagor :
(*b.*) Estate :
(*c.*) Land : [*Area and particulars*].
(*d.*) Reference to title in Register :
(*e.*) Mortgagee :
(*f.*) Principal sum :
(*g.*) Date of advance :
(*h.*) Rate of interest :
(*i.*) How payable :
(*j.*) How and when principal sum to be repaid :
(*k.*) Special covenants or conditions.

And for the better securing to the said (*e*) the payment of the said principal sum, interest, and other moneys, I [*or* we] hereby mortgage to the mortgagee all my (*or* our) estate and interest in the said land above described.

As witness my hand (*or* our hands), this day of , 19 .

(*l*) A. B.,

Mortgagor.

Signed by the said (*m*) A. B., as mortgagor, in the presence of (*n*) —

G. H.,

[*Occupation and address*].

Directions for filling up above Form.

(*a.*) Here insert full name, residence, and occupation of mortgagor (*or* mortgagors), as thus: "A. B., of Wellington, Farmer".

(*b.*) Here insert "freehold in fee-simple" or "leasehold", as the case may be.

(*c.*) Here insert acreage, number of section and block, and name of survey district, city, town, or township in which the land is situated.

(*d.*) Here insert number and folio of register.

(*e.*) Here insert full name of mortgagee [*or* mortgagees].

(*f.*) Insert amount.

(*g.*) Fill in date.

(*h.*) State rate agreed upon.

(*i.*) Here insert "yearly," "half-yearly," "quarterly," or otherwise, as the case may be.

(*j.*) Here insert date and mode of payment agreed upon.

(*k.*) Here insert special covenants or conditions.

(*l.*) Signature of mortgagor [*or* mortgagors].

(*m.*) Name of mortgagor [*or* mortgagors].

(*n.*) Signature of witness, stating place of above and calling or description of witness.

Form 9.

MEMORANDUM OF INCUMBRANCE FOR SECURING A SUM OF MONEY.

I, A. B., being registered as proprietor of an estate [*Here state nature of the estate or interest*] (subject, however, to such incumbrances, liens, and interests as are notified by memoranda underwritten or indorsed hereon) in that piece of land situated in the District [County, *or* Township] of , containing [*Here state area*], be the same a little more or less (*exclusive of roads intersecting the same, if any*) [*Here also state rights of way, privileges, or easements, if any, appertaining; and, if the land to be dealt*

with contains all that is included in an existing grant or certificate of title or lease, refer thereto for description of parcels and diagram; otherwise set forth the boundaries in chains, links, or feet, and refer to plan thereof on margin of or annexed to the memorandum of incumbrance, or deposited in the Registry Office, and refer also to the existing grant, certificate, or lease], and desiring to render the said land available for the purpose of securing to and for the benefit of C. D. the sum of money [annuity *or* rent-charge] hereinnafter mentioned, do hereby incumber the said land for the benefit of the said C. D. with the sum [annuity *or* rent charge] of £ , to be raised and paid at the times and in the manner, following, that is to say: [*Here state the times appointed for the payment of the sum, annuity, or rent-charge intended to be secured; the interest, if any; and the events on which such sum, annuity, or rent-charge shall become and cease to be payable; also any special covenants or powers, and any modification of the powers or remedies given to an incumbrancee by the Act*]. And, subject as aforesaid, the said C. D. shall be entitled to all powers and remedies given to an incumbrancee by "The Land Transfer Act 1915."

In witness whereof I have hereunto signed my name this day of

A. B.

Signed by the above-named A. B., as incumbrancer, in the presence of—

E. F.,

[*Occupation and address*].

Form 10.

(1) MEMORANDUM OF INCREASE OR REDUCTION OF MORTGAGE-DEBT.

THE principal sum intended to be secured by the within- [*or* above-] written [*or* annexed] mortgage is hereby increased [*or* reduced] to £ : :

Dated this day of, , 19 .

A. B., Mortgagor.

Witness to the signature of the said A. B. as mortgagor:

E. F.,

[*Occupation and address*].

C. D., Mortgagee.

Witness to the signature of the said C. D. as mortgagee:

G. H.,

[*Occupation and address*].

Form 11.

(1A). MEMORANDUM OF INCREASE OR REDUCTION IN RATE OF INTEREST.

THE rate of interest payable under the within- [*or* above-] written [*or* annexed] mortgage is hereby increased [*or reduced*] to £ per annum.

Dated this day of , 19 .

A. B., Mortgagor.

Witness to the signature of the said A. B., as mortgagor:
E. F.,

[*Occupation and address*].

C. D., Mortgagee.

Witness to the signature of the said C. D., as mortgagee:
G. H.,

[*Occupation and address*].

Form 12.

(2) MEMORANDUM OF RENEWAL, SHORTENING OR EXTENSION OF TERM OR CURRENCY OF MORTGAGE.

THE term or currency of the within- [*or* above-] written [*or* annexed] mortgage is hereby renewed [shortened or extended] to the day of , 19 [*or as the case may be*].

Dated this day of , 19

A. B., Mortgagor.

Witness to the signature of the said A. B. as mortgagor:
E. F.,

[*Occupation and address*].

C. D., Mortgagee.

Witness to the signature of the said C. D. as mortgagee:
G. H.,

[*Occupation and address*].

Form 13.

CAVEAT FORBIDDING LANDS TO BE BROUGHT UNDER THE ACT.

To the District Land Registrar of the District of .

TAKE notice that I, , of , claiming estate or interest [*Here state the nature of the estate or interest claimed, and the ground on which such claim is founded*] in lands described as [*Here state particulars of description from declaration of applicant*), in notice dated the day of . advertising the same as land in respect to which claim has been made to have the same brought under the provisions of "The Land Transfer Act, 1915" do hereby forbid the bringing of the said land under the provisions of the said Act.

And I appoint as the place at which notices relating hereto may be served on me.

Dated this day of , 19 .

A. B.

Signed by the above named A. B., as caveator, in the presence of —

C. D.,

[*Occupation and address*].

Form 14.

CAVEAT FORBIDDING REGISTRATION OF DEALING WITH ESTATE OR INTEREST.

To the District Land Registrar of the District of .

TAKE notice that I [*Name of caveator*], of [*Occupation and address*], claiming estate or interest [*Here state the nature of the estate or interest claimed, and the ground on which claim is founded*] in [*Here describe land*), forbid the registration of any memorandum of transfer or other instrument affecting the said land until this caveat is withdrawn by me, or by order of the Supreme Court or some Judge thereof, or until the same has lapsed under the provisions in that behalf contained in section 155 of the Land Transfer Act, 1915.

And I appoint [*Here state an address within the registration district*] as the place at which notices relating hereto may be served.

Dated this day of , 19 .

Signed by the above-named A. B., as caveator, in the presense of

C. D.,

[*Occupation and address*].

SWEDEN.

AGRICULTURAL LABOUR AND WAGES (*Continued*).

III. — THE TORP AND ITS PLACE IN THE AGRICULTURAL LABOUR SYSTEM.

The *torpare*, or owner of a *torp*, has so far been considered in his capacity of labourer, but, as we have said, he is also a tenant farmer; indeed, in the eyes of the law he is considered only as such. Moreover, his work differs from that of other agricultural labourers in several respects. It is therefore advisable to give a few further particulars about the *torpare* considering his position in the general economy of agriculture from this other point of view.

There were 1,399 *torps* on 146 out of the 238 holdings to which the enquiry refers, that is to say on 61.3 % of the estates, but when the statistical returns were secured 13 of these *torps* were temporarily vacant. Of the 1,386 *torpare*, 1,253, or 90.4 per cent, found employment on the landlord's estate as permanent or as casual labourers; the remaining 133 (9.6 %) were entirely independent thereof.

Very few *torps* (4.2 %) are granted gratuitously; almost all (1,328) are granted in return for payment; of these 72.4 % are granted in return for personal services, and 23.4 % in return for a rent paid in kind (milk, cereals) or more often in cash. In the north, rent is the more usual form of payment (60.7 %); in the west, personal services (78.9 %).

The size of the *torp* varies greatly as can be seen by the following table.

Distribution of Torps by Size.

Percentage of *torps* having a cultivated area of					
Less than 1 hect.	From 1 to 1.9 hect.	From 2 to 4.9 hect.	From 5 to 9.9 hect.	10 hectares or over	Unknown
9.5	17.2	40.9	24.5	5.4	2.5

About one half of the *torps* covered an area of from 2 to 5 hectares. 65.4 per cent from 2 to 10 hectares. In this latter group concessions are never made gratuitously ; the person to whom the grant is made always has to make payment, which, in the case of 80 per cent. of the *torps*, takes the form of personal service, while in the case of the remaining 20 per cent. payment is made in the form of rent in cash or in kind.

The grant of a *torp* always carries with it that of a dwelling house, consisting generally of a cottage with one large room with a fire-place and two smaller rooms. The rentable value varies from 20 to 100 crowns per year, the amount depending on whether repairs and upkeep of the cottage devolve entirely or only partially on the tenant. In wooded districts the *torpare* is also, entiltled, as a rule, to a free supply of fuel from his landlord and has the right to gather wood on the estate, a privilege valued at from 30 to 75 crowns a year according to the size of the cottage. It is also a general rule, more especially in the case of the larger *torps*, that the payment of taxes and other dues is made by the landlord, who also provides, free of charge, the use of draft animals and the implements required for cultivating the soil. The grant of a *torp* also frequently includes the right to graze on a certain area of pasture land, and other minor privileges.

These advantages are offset by drawbacks ; for instance, the land is often poor in quality, draining is insufficient, and so forth.

It is interesting to compare the number of head of live-stock on the *torp* with that on the principal estates of which we have already spoken.

	Average number of cows per 100 hectares of cultivated land on *torps* of an area of —				
	Less than 1 hect.	From 1 to 1.9 hect.	From 2 to 4.9 hect.	From 5 to 9.9 hect.	10 hectares or over
On *torps* granted in return for personal services	236	135	100	74	53
On *torps* granted in return for other forms of payment	224	134	79	71	46
On *torps* granted gratuitously	305		129		

This table confirms the conclusions arrived at from a study of the number of head of live-stock raised on the leading holdings, that is to say it shows that on small holdings, even if they take the form of *torps*, the live-stock is more numerous than on larger holdings ; it also that shows that on *torps* granted on lease there are fewer cows than on the other kind of *torps*. This is accounted for by the fact that as a rule these *torpare* enjoy in a minor degree the right to free pasturage for their stock.

We must now say a few words about the services which the *torpare* or grantee has to render, and more especially about the obligation he is under

to perform a certain amount of work for his landlord. It should, however be noted that in this respect there is no clear line of demarcation between the three kinds of *torps* above referred to; even in the case of free grants of land the landlord can claim certain personal services. There are also intermediate forms in which grants are made in return for payment partly in money and partly in labour.

So as to allow of comparison between all the forms of payment to which *torpare* are subject they have all been converted to their cash value. On this basis we see that the 1,328 *torps* paid an annual rent charge of 223,633 crowns, 81.5 per cent. of which was paid in the form of days of labour and 18.5 per cent. as rent payable in cash or in kind.

Comparing the rent to the size of the *torp* we get the following figures :

Particulars of Rent per Hectare for Torps.

	Average annual value of payment per hect. (crowns)	Average value (in crown) of the payment per hect. for *torps* of —				
		less than 1 hect.	from 1 to 1.9 hect.	from 2 to 4.9 hect.	from 5 to 9.9 hect.	10 hect. and over
Torp granted in return for personal services	45	114	77	56	37	30
Torp unencumbered by dues of personal service	34	68	45	36	38	19

The average payment is thus seen to be much less in the case of *torps* unencumbered by dues of personal service, especially as in those cases the *torpare* is entitled to fewer of those privileges which usually accompany the other kind of grant.

By estimating the cash value of such privileges and deducting same from payments made, we can ascertain the net price charged for the grant and compare it with the rents paid for land held under other tenures.

This we have been able to do for only 213 *torps* for which payment is made in the form of days of work. The result is shown in the following table.

	Cultivated area of the *torp*				
	less than 1 hect.	from 1 to 1.9 hect.	from 2 to 4.9 hect.	from 5 to 9.9 hect.	10 hect. and over
Net value of rent in crowns	52	29	29	25	29

We thus see that the annual rent of a *torp* varies from 25 to 52 crowns per hectare. The *torp* system would not therefore be profitable to the landlord if the cash rent obtainable from it were the only compensation. But the *torp* fulfils another important function in agriculture ; it affords the landlord a steady supply of labour. As we have already said more than once, the grantee is generally bound by his lease to work for a certain number of days on the lands of the grantor. The number of these days varies, as can be seen by the following table.

Number of *torps* which supplied information	The percentage of *torpare* required to perform during the year from —					
	1 to 49	50 to 99	100 to 149	150 to 199	200 or more	Average number of days of labour per *torp*
	days of labour is :					
1,003	10.8	23.4	30.4	18.7	16.7	125

We thus see that each *torp* is expected to provide, on an average, two and a half days of labour per week, and about one-third of the *torps* are required to provide four or more days a week.

Considered with reference to their area we have, however, the following figures :

Area of *torp*	Average number of days of work required per week
Less than 1 hect	32
From 1 to 1.9 hect	71
" 2 to 4.9 "	124
" 5 to 9.9 "	162
" 10 hect and over	208
Unknown	91

These figures show that only *torps* covering an area of more than 10 hectares are required to provide 4 or more days of work per week.

This work may be performed by the *torpare* himself or by a member of his family, or even by a labourer hired by him : it is generally performed by his wife with the assistance of the children. (1)

As a matter of fact the *torpare* provides the landlord with considerably more labour than he is bound to do by the terms of this lease.

This is clearly shown by the following table.

(1) The days of labour performed by the wives of the *torpare*, according to the incomplete data obtained for only 138 *torps* amount in all to 3,948 or 21.2 % of the days of labour performed by their husbands.

Number of Days' Work furnished by Occupiers of Torps.

Torps granted	Number of *torps* for which data were available	Percentage of *torps* which suplied						Annual average no. of days of work supplied per *torp*.
		0	1-49	50-99	100-149	150-199	200 or more	
		days of work during the year						
In return for personal services . .	1,003	0.7	5.6	12.2	21.1	20.2	40.2	180
In return for other payments	325	38.2	3.7	5.8	4.9	7.4	4.0	136
Gratuitously	58	5.2	—	—	5.2	12.0	77.6	245

Thus while the number of torpare who are required to perform 200 or more days work per year was barely 16.7 per cent., the number of those who actually did provide this amount of labour was 40 per cent. It should however be borne in mind that the amount of work actually contributed by the *torp* varies with its size. The amount of work performed by holders of *torps* granted gratuitously or in return for payment in kind or cash, is however, surprising. In the case of the former it is certainly true that they are as a rule very small and held by aged labouiers unfit for work. But when, as frequently happens, the *torpare* is able bodied, he is then under an obligation, more of a moral than a legal nature, to assist, as far as possible, in certain kinds of work on his landlord's farm : hence the high percentage of days of work performed during the year by *torpare* coming under this category (245 per *torp*).

The number of days of work per formed by those *torpare* who are required to make payments in kind or cash, only averages 136 per year, and the percentage of those who did no work for their landlords is naturally high (38.2 %) ; nevertheless no fewer than 40 per cent. worked thus for 200 and more days in the year. Naturally, however, such an amount of work can only be performed for the landlord when the *torp* is so small as not to suffice for the support of the *torpare* and his family ; and in such cases, the *torpare* is practically compelled to offer his services to his landlord, for, as a rule, no other source of income exists in the neighbourhood.

This shows that in such a country as Sweden, in which the population is very scattered, the large landowner enjoys an effective monopoly of the labour market, and this in spite of the fact that the demand for labour, due to the development of manufacturing industries, has increased of late years even in country districts.

MISCELLANEOUS INFORMATION RELATING TO AGRICULTURAL ECONOMY IN GENERAL IN VARIOUS COUNTRIES.

GERMANY.

THE WORK OF THE ROYAL COLONISATION COMMISSION FOR THE PROVINCES OF WEST PRUSSIA AND POSEN. — *Archiv für Innere Kolonisation*, Berlin, Vol. VII August-September 1915, pp. 309 et sqq.

The report of the work of the Royal Colonisation Commission in 1914, presented to the Diet in 1915, is noticeably shorter than the reports of the preceding years. The outbreak of the war has had a great effect upon activities of the Colonisation Commission. With the exception of purchases that were previously definitely agreed upon, the purchase of estates has been entirely suspended while as for *the new holdings*, they have not been put up for competition, since the demand for them has almost ceased. The report thus, for the most part, only deals with the first 7 months of 1914.

The report contains no data as to the number and extent of the estates and holdings offered to the Colonisation Commission ; it is therefore impossible to determine how far the insecurity of the political situation which preceded the war has influenced transactions on the estate market. The last report (1913) was able to show, in a general manner, that the offers of estates had increased *pari passu* with a satisfactory decrease in the offers of peasant holdings (less than 100 ha). This, it was thought, might be attributed to the activity of the two banks, those of Danzig and Posen, that were entrusted with the consolidation of property (*Besitzbefestigungsbanken*). In 1914, in the same way, the process of consolidating landed property was carried out in a regular manner. To the 9,373 peasant holdings representing an area of 180,619 ha. upon which the debts had been paid up to the end of 1913, there were added in 1914, 1,157 peasant holdings covering 22,412 ha ; further, at the end of 1914, the debts upon 2,488 peasant holdings were in course of being liquidated.

Land purchase is for the most part effected on the basis of free transactions. The law of March 20th. 1908, dealing with expropriation, on the basis of which 4 estates had been purchased in 1913, was not applied during the year with which we are dealing. Five properties have been

acquired by legal auction (forced sale); they represent an area of 818 ha. Two of them were large German holdings (of 115 and 535 ha. respectively), while the three others were Polish farms of 26, 51, and 91 ha. The sums bid reached 1,266 and 1,955 marks per hectare in the case of the large German holdings, and to 773, 1,913 and 2,216 marks in that of the Polish farms.

The Administration of Crown Lands made over to the Colonisation Commission 5 estates with a total area of 1,497 ha. at the price of 1,565 marks per hectare; it also made over to the Colonisation Commission 54 ha. of meadow-land. This brings up to 50 the number of State properties that have been sold to the Colonisation Commission ; 21 in West Prussia and 29 in the Province of Posen.

There have also been purchased by private treaty:

2 Gentlemen's estates (*Herrschaften*) of . . .	3,575 ha at	1,817 m. per ha.
8 Estates belonging to the nobility (*Rittergüter*)	4,130 » »	1,843 » » »
26 Large estates (*Güter*).	3,976 » »	1,628 » » »
19 Peasant holdings	564 » »	2,430 » » »

The amount of land acquired thus reached a total of 14,614 ha. and in 7 months almost attained the total figure of 1910, namely 14,898 ha.; it is, however, 4,227 ha. less than in 1913 and is 2,582 ha. below the average of the previous six years.

The regency of Posen furnished most of the properties acquired, or 50.8 %; next came the regency of Bromberg with 24.2 %, while the remaining 35 % were divided in almost equal parts between the two regencies of the Province of West Prussia. The purchase price amounted to a total of 25,894,574 marks, or 1,772 marks per hectare and 190.4 marks for 1 mark of the normal net return fixed by the cadastre. The average price per hectare has fallen 2.7 % in comparison with 1913, at which date it amounted to 1,821 marks. If expressed per mark of the normal net return fixed by the cadastre, the average price of the hectare has, on the contrary, increased 10 % (from 173.1 marks to 190.4 marks). This increase in the average price of the hectare is explained by the continual improvement of the soil and of its cultivation in the eastern parts of the country.

Polish properties amounted to 9.6 % of the total purchases, or 1,408 hectares at an average price of 1,845 marks per hectare and 203 marks per unit of net cadastral return. In 1913, 22.9 %, or if we substract the expropriated estates, 15.4 % of the total purchases were in Polish hands.

Until the end of the business year 1914, the Colonisation Committee had bought 453,174 ha. or 80 square leagues, that is to say 811 estates with a total area of 423,289 ha. and 617 peasant holdings covering a surface of 29,885 ha.; 213 of these estates, and 269 of these holdings (27.9 % of the total purchases and 23.6 % of the total purchase price) were Polish properties.

The report of the preceding business year (1) dealt in a circumstantial manner with the fluctuations in the price of the properties bought by

(1) *Archiv für Innere Kolonisation*, Vol. VII, No. 3.

the Colonisation Commission. The average price of the hectare has fallen, on the whole, 2.7 %. In the case of the large estates, however, it is still always 25 % above what it was in 1912, and in the case of the peasant holdings that have been acquired, the increase is 16 % as compared with the preceding business year. The purchase price expressed in terms of the unit of the net cadastral return having at the same time increased 10 %, it follows that, until the time of the outbreak of the war, there could be no question of retrograde movement in the land market.

The highest average price paid for an estate was 2,661 marks per ha.; a peasant-holding of 19 ha. situated in a town, fetched an average price of 7,518 marks, while the highest sum paid per ha. for a rural peasant holding of 79 ha. was only 3,298 marks. The lowest figure obtained per hectare was 648 marks for an estate and 773 for a peasant holding.

For one mark of net return fixed by the cadastre the prices vary from 143 to 423 marks in the case of peasant holdings, from 73 to 769 marks in the case of landed property situated in a town, and to 321 marks in that of rural property.

Colonising activity, in the proper sense of the word, as practised by the Commission has suffered from the war to a still greater extent than the business of land purchase. In all, only 528 contracts have been drawn up (1109 in the preceding year) of which 426 (53, or 12 % being leases) have been definitively ratified. 1223 estates have been put up to auction, so there thus remained 797, or 65.2 %, which at the end of the business year found no lessee.

The percentage of properties finding no lessee has consequently increased in the course of the last years : 31 % in 1911 ; 34 % in 1912 ; 39 % in 1913.

As the report furnishes no information regarding the number of competitors, it is not possible to determine how far the want of success in 1914 is perhaps attributable to lack of applicants.

The 426 estates sold by auction represent 5,242 ha. and a value of 8,667,233 marks; their average area is thus 12.30 ha. and their average value 20,346 marks.

The properties that have been sold, or leased, may be grouped as follows according to their size :

69	properties of	less than	2 ha.	= 16.2 %
7	»	» between	2 and 5 »	= 1.6 %
62	»	» »	5 » 10 »	= 14.5 %
259	»	» »	10 » 20 »	= 60.8 %
28	»	» »	20 » 100 »	= 6.7 %
1	property	of	over 100 ha.	= 0.2 %
426	properties	of an area of	5,242 ha.	= 100.0 %

As is seen, it is the peasant holdings (*Bauernstellen*) of from 10 to 20 ha. in area which predominate. During the last 10 years, properties

of this type have amounted to 53.4 and 68.5 % of the total number offered by auction. The proportion of holdings of from 5 to 10 ha. (*Halbbauernstellen*) has increased and almost attained the percentage obtaining in the years 1900-1905, after having fallen, from 1905 to 1913, to 3.5 % of the number of properties sold by auction. In compensation, a smaller number of workers' holdings (*Arbeiter-* or *Häuslerstellen*) have been recorded. These holdings, during the last quinquennial period, have amounted to about a quarter of the properties sold by auction. To the 69 holdings of this kind which are reckoned in 1914, 70 must be added which were established, with the assistance of the Colonisation Commission, by the associations occupied in the creation of small holdings (*Kleinsiedlungsgenossenschaften*) of the Provinces of West Prussia and Posen, as well as by some of the administrations of *Bezirke*.

The Colonisation Commission has itself created up to the end of 1914, a total of 2,495 workers' holdings of at least 2 ha. in area, and has collaborated in the foundation of 502 others.

As for the workers' dwellings, with 2 morgen (½ ha.) of land attached, which were built for letting purposes in the course of the preceding years, 11 of these have been again transformed into *Rentenstellen*, so that at the end of 1914 the number of these dwellings was not more than 104. The total number of properties created up to the end of 1914 thus amounts to 21,683 (19,395 rented and 2,288 leased properties).

The following are the original homes of the colonists that have settled:

	in 1914	up to 1914
Provinces of West Prusssia and of Posen	122, or 28.7 %	5,706, or 26.3 %
Other Prussian Provinces	163 » 38.3 %	8,138 » 37.6 %
The Rest of Germany	50 » 11.7 %	2,212 » 11.1 %
Foreign countries	91 » 21.3 %	5,427 » 25.0 %
Or, as has already been said, a total of:	426 » 100 %	21.683 » 100 %

As is seen, the localities from which the colonists have come remain about the same, but the Provinces have taken a somewhat larger part in the colonisation, at the expense of foreign countries. It will be particularly observed that the participation of the other Provinces of Prussia has remained stationary as regards the total number. The establishment of provincial colonisation societies of late years in most of the Provinces has apparently exerted no effect upon the number of competitors who have applied to the Colonisation Commission.

In consequence of the paucity of the results obtained, the area of land available for the creation of new properties was, at the end of 1914, considerably larger than at the close of 1913, namely 26,563 ha. as against 21,848 ha. The land still to be disposed of will suffice for the constitution of about 2,160 properties.

The Colonisation Commission drew up and resolved upon 30 *new colonisation schemes* in 1914, (53 in 1910) for an area of 11,086 ha.; 311 ha. of

the area to be parcelled out, or 2,8 %, were set apart for making roads and ditches and 2,186 ha. (19.7 %) were intended to provide for the new holdings of school and communal lands, as well as to serve as reserves for various purposes and with a view to the future enlargement of holdings. The 8,590 remaining hectares ought to allow of the formation of 694 holdings of an average area of 12.4 ha. We may say, as far as the details of the scheme are concerned, that it is intended to make 443 *Vollbauernstellen* of from 10 to 20 ha,, 98 *Halbbauernstellen* of from 5 to 10 ha., 112 artisans' and workers' holdings of from 0 to 5 ha., and finally, 43 larger peasant holdings of from 20 to 50 hectares.

Since the Colonisation Commission began its work, 919 colonisation schemes, embracing an area of 380,588 ha. had been drawn up.

The satisfactory slowness with which property has changed hands of late years has also extended to 1914. 438 properties, or 1.4 % have changed owners (576 or 1.9 % in 1913) of which 419 were rented and 19 leased properties. The cases are attributable, for the financial year in question, to the following causes :

Exchanges between relations either through inheritance or transfer . .	149
Reasons of a personal nature	133
Insufficient resources, or incapacity	58
Bad business ending in putting up to auction.	13
Purchase of larger properties	85
	438

In a number of cases, the sale brought in a considerable profit. The report does not allow us to state to what extent the properties of the different categories of size have changed hands in 1914. The following remarks show the manner in which the Colonisation Commission has tried before division to increase the return of the estates to be colonised. 2,059 ha. of fields have been drained, 561 ha. of marsh-land and meadows have been improved and 28,420 m. of roads have been consolidated by paving or metalling. With the view of encouraging cattle breeding, 10 stud bulls that are entered in the Herdbook have been given to the colonists; 122 cows and heifers belonging to the the herds of the estates to be colonised have been sold to the colonists, and to the workers, while grants of 1000 marks have been made to the colonised communes for the purchase of stud bulls.

In order to promote the cultivation of fruit and of kitchen garden produce, 24,856 fruit trees, 7,157 forest and ornamental trees have been given to the colonists, as well as 5,512 shrubs for the construction of hedges for their gardens, or for roads and public squares ; 20 model gardens have also been planted with 1,044 fruit trees, 33 new arboreta have been made which brings up the number to 144. Four shrubberies have been planted for the protection of birds and 1182 artificial nests made according to the Berlep system have been affixed to the trees.

Amongst the colonists, 8 new co-operative credit societies have been established, 4 dairy societies, one threshing association, one co-operative purchase and sale society, one association for the utilisation of electricity and 3 agricultural societies. There are at present in the colonies 807 co-operative credit societies, 144 dairy societies, 96 distilling societies, 43 co-operative societies for sale and purchase, 3 granaries and 91 other associations.

Just as the Colonisation Commission has sought to protect the colonists from the inconvenience caused by the War by conceding long extensions of time for the fulfilment of engagements contracted with the State, it has also made every effort to help the colonists in the difficulties they might encounter. Thus immediately after the commencement of hostilities, a labour exchange was instituted at the headquarters of the Colonisation Commission in order to remedy the lack of labour and to supply the unemployed with work on rural farms. Thanks to this institution, 278 employers (82 large proprietors and 196 small cultivators of both nationalities) as well as the Crown etates, have been able to obtain workers. At the end of 1914, there was an excess of hands rather then any deficiency on the colonised estates.

On the other hand, the Colonisation Commission was of opinion that it was its duty to assist all landholders who were unable to cope with their difficulties. The wives of the mobilised colonists especially were actively helped by the administrations of the Crown estates during the work of harvesting and preparing the ground.

Let us observe in conclusion, that the Colonisation Commission at the end of 1914 had still at its disposal, 155,100,362 marks of which 74,085,642 marks were destined for carrying out the work, properly so-called, of the Colonisation Commission and 81,014,720 for the consolidation of small and large landed property in the colonisation provinces.

GREAT BRITAIN AND IRELAND.

AGRICULTURAL OCCUPATIONS CERTIFIED FOR EXEMPTION FROM MILITARY SERVICE. — "Notice to Farmers. Military Service Act, 1916" (Circular issued by the Board of Agriculture). — *Journal of the Board of Agriculture*, N. 11, February, 1916.

Under the Military Service Act, 1916, Government Departments are empowered to certify that men engaged in certain occupations (known as "certified occupations") may be exempted from military service on the ground that the work of such men is work of national importance.

The Agricultural Occupations which have been so certified by the Board of Agriculture are as follows:

Agricultural Engine-men and Mechanics. — Agricultural Machinery, Steam Ploughs and Threshing Machines. Attendant, Driver, Mechanic

Farm Workers. — Farm Bailiff, Foreman, Grieve, Steward.
Farm Beastman, Byreman, Cattleman, Stockman, Yardman.
Farm Carter, Horseman, Ploughman, Teamster, Waggoner.
Farm Hind (if foreman or ploughman).
Farm Servant (if foreman or ploughman) (Scotland).
Farm shepherd.
Thatcher.

Farmers and Market Gardeners. — Farmer (including market gardener and fruit farmer) provided that :

(*a*) Farming is his sole occupation, and his personal labour or superintendence is indispensable for the proper cultivation of his holding; or,

(*b*) If he is partly occupied in another occupation, and his personal labour or superintendence is indispensable for the proper cultivation of his holding, and such cultivation is expedient in the national interest.

Hop, Fruit and Market Gardens. Foreman in all Departments.

Stud Attendants. — Stallion man (a man who looks after and travels with a stallion) Stud Groom (Scotland).

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SOLDIER LABOUR ON FARMS. — "Notice to Farmers as to Soldier Labour" (Circular issued by the Board of Agriculture). — *Journal of the Board of Agriculture*, N. 11, February 1916.

In view of the shortage of agricultural labour, the following arrangements have been made by the Army Council for the employment of soldiers (other than convalescents) on farm work at any season of the year except during the corn harvest :

Furlough will be given at the discretion of the Military Authorities, and as circumstances permit, to a limited number of soldiers serving at home who have been accustomed to work on farms.

The furlough granted to each soldier will last only for such number of days, not exceeding 4 weeks, as is actually required for the work.

The employment of soldiers will be subject to the following conditions :

(*a*) That suitable labour cannot be obtained in the locality.

(*b*) That the farmer will undertake to pay each soldier sent at his request :

(*i*) 4s. a day if the soldier provides his own board and lodging.

(*ii*) 2s. 6d. a day if board and lodging is provided by the farmer.

The hours worked to be those customary in the district.

(*c*) That the farmer will provide conveyance from and to the nearest railway station.

The above rates to be inclusive of all allowances, and to be paid, wet or fine.

No charge will be made to the farmer for railway travelling expenses.

Applications will be made to the Board of Trade Labour Exchanges, who will transmit them to the Military Authorities. In the case of a farmer living in the neighbourhood of a military station, he may apply direct to a Commanding Officer for military labour which he requires at short notice, and for a period not exceeding six working days.

Somewhat similar arrangements have been made for the employment of convalescent soldiers on agricultural work within easy reach of where they are stationed.

For convalescents, the rates of payment, in the case that the soldier goes away from his military station, will be 3s. 6d. a day if the soldier provides his own board and lodging, or 2s. a day if board and lodging is provided by the farmer. If the soldier goes and returns each day to his depot or hospital, the farmer must pay him at the rate of 3d. per hour, including hours for meals.

It is also provided in the case of convalescents, that one rest day must be allowed by the farmer in every seven days.

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WOMEN'S WORK ON THE LAND. — *Journal of the Board of Agriculture* [No. 11, February 1916.

The Board of Trade, in consultation with the Board of Agriculture, are taking active steps to mobilise a sufficient supply of women for work on the land, in order to meet the shortage of agricultural labour due to the enlistment of men in the Army. The reserves of women's labour available for agriculture are to be found chiefly among the local unoccupied women in country villages who have some experience of or familiarity with agricultural work, and also among the better educated women who are willing to be trained for this purpose.

Women's county committees, working either in co-operation with, or as sub-committees of the War Agricultural Committees, have already been established in twenty five counties ; in the other counties it is hoped that similar committees of women will shortly be formed. A scheme of systematic propaganda work is being carried on in all parts of the country by means of local meetings, followed by house to house canvass. Village registers are being established and women urged on patriotic grounds to enrol for farm work for whole or part time. In order to press forward with this work, the Board of Agriculture is forming a panel of speakers who will be available to address meetings, and additional women organisers have been appointed by the Board of Trade and allocated to various parts of the country.

RUSSIA.

AGRICULTURAL IMPROVEMENTS IN RUSSIA. — Торгово-Промышленная Газета (*Journal of Industry and Commerce*) No. 236, October 24th., 1915.

Some information concerning the agricultural improvements, in the strict sense of the term, which have been carried out in Russia, that is to say, the drainage of the marshes and the irrigation of the arid districts, may be of interest.

Works for draining the marshes that extended round Petrograd and improving the sanitary conditions of that town were carried out as early as 1818.

Although the principal object of these operations was hygienic, they however permitted agriculture to recover extensive and fertile tracts which, thanks to the proximity of the capital, could be transformed and used for market gardening.

A very long period elapsed before the idea arose of improving the land from the purely agricultural standpoint. A ministerial circular issued in 1854 and drawing attention to the importance of draining the marshes is of some interest in this respect. In this we read: "In Russia, and especially in the Northern and Central Provinces, there is much marsh land which is not only unprofitable, but is also injurious to the health of the population. Once drained, these marshes could become meadows, or often even cultivated fields . . . . The scarcity of hay is a hindrance to the satisfactory development of stockbreeding, the insufficient number of animals decreases the supply of natural manure available for agriculture and without manure, no crop can grow well, even in the steppes."

The great reform of 1850 threw into the background the problem of agricultural improvements, but in 1870 it again engaged public attention. The persons interested in the question then passed from general schemes and theoretical discussions to the study of practical problems.

In 1872, the Commission appointed to study the conditions of agriculture and agricultural production formed what were called the "expeditions." Of these, two were to devote themselves to the drainage of the marshes of the north and northwest of Russia, while a third was entrusted with studying the irrigation of the steppes in the south of the Empire.

In the period of thirty years, the two first "expeditions" succeeded in draining about one million deciatines. This figure taken by itself is very large, but when compared with the total area of marsh land in Russia in Europe, it shrinks into insignificance, for there were in this region in 1887, according to the data of the Central Statistical Bureau, 14 millions of deciatines of marshes. Thus marshes covered 17.2 % of the country. (In France the percentage of marshland is 14.3, in Italy 13.1 and in Holland 26.9).

Notwithstanding this, the State did not devote large sums to

land improvements. From the statement of the *Cour des Comptes*, the State seems only to have expended 300,000 roubles annually for this purpose.

The third "expedition" which was entrusted with the irrigation of the steppes of south Russia has given hardly any results.

In 1902, the "expeditions" were dissolved; the agricultural improvement operations were reorganised and decentralised. In each province, work of this nature was undertaken and its execution confided to the local authorities, assisted by a special technical staff.

The State furnished for the purpose constantly increasing sums, as is shown by the following table.

Year	Roubles
1909	1,338,189
1910	2,362,147
1911	2,875,463
1912	6,596,036
1913	9,798,161
1914	13,503,500

The zemstvos also have begun of late years to interest themselves in the question. The difference between the attitude of the Government towards the question of land improvement and that of the zemstvos must be regarded as due to the development of the economic and agricultural life of the country. We must in fact remember, amongst other things, that the *nadiel* (1) of the Russian peasant, which in 1860 was, on an average, 6 deciatine per head (Russia in Europe), only amounted in 1900 to 2.7 deciatines. There is thus no doubt of the necessity of recovering for agricultural purposes an increasingly large extent of land suitable for cultivation. Moreover, it should be noted that the process of transforming untilled tracts into arable land, that is to say agricultural improvement in its entirety, has become much easier to day for the reason that it is far more profitable. This is due to the constant increase in the population, the development of railways and of navigation, the increased price of agricultural produce, and the adoption of more intensive cultural methods which have produced the effect of attracting more and more capital to this work, since it is advantageous from the economic standpoint and permits of continually extending the limits imposed by the law of decreasing returns.

In this respect, the prospects which are still open in Russia to agricultural improvement are very vast.

(1) The portion of land given to the peasant at the time of his enfranchisement.

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THE COLONISATION OF THE REGION AT THE MOUTH OF THE AMUR (Торгово-Промышленная Газета) (*Journal of Industry and Commerce*). No. 264 November 27th., 1915.

"Siberia is rich in everything except men; economic and agricultural life can only flourish in the country if a strong current of labour is directed thither from Russia." These words which were spoken by the former Russian Ministers, P. A. Stolypin and A. W. Krivochin, in 1912, contain the whole programme of the Russian policy of colonising immense regions in Siberia. The colonisation and improvement of Siberia, a country which is so rich in unexploited natural wealth and so poor in human productive power, commenced first in the provinces on the borders of Russia in Europe Tomsk, Tobolsk, etc, that is to say, in West Siberia. Gradually, the colonists have advanced more and more into the interior of the country and at the present time the Government is seeking to direct the stream of labour to the most distant parts of Siberia, those situated on its extreme eastern boundary, in the basin of the Amur.

In order to render this region accessible to colonisation — it covers about 400 000 sq. km., and is therefore, as Nansen has said, almost as large as the German Empire minus South Germany — it was necessary in the first place to establish in the country certain conditions enabling the colonists to settle there and undertake profitable work.

In order to study these conditions, the Governor of Sakhalin has, this winter, organised a special Commission composed of members of the Government and of other public bodies, of associations and of fishery undertakings, of representatives of the Press and of other persons acquainted with the country.

The Commission will sit at Nicolaievsk, on the Amur, and will be divided into the following special sections:

An administrative section for emigration which will study the technique of colonisation and its systematic organisation according to the general principles laid down by the central authorities.

A fishery section, which will deal with the antagonism existing between the interests of the large capitalists engaged in fishery undertakings and the interests of the small peasants. Fishing in this region is of paramount importance for it is almost the only productive occupation of the colonist.

An agricultural section for encouraging the colonisation of the Taiga (where gold is abundant) and of the region inhabited by foreign races. In this region the systematic breeding of reindeer is to be introduced.

A section of communications to which will be entrusted the development of railways, both in the interest of the region and that of the State. The improvement of the means of communication would allow of the coal mines being worked and would establish an uninterrupted line of railway

to the interior of the Empire. This line would pass through Nicolaievsk, Pogiba, and Sakhalin and go to Japan.

A credit section for promoting the foundation of co-operative productive and distributive societies.

Finally a hygiene section for the purpose of improving the sanitary conditions of the country; a building section, and forestry and domestic industry (*Kustar*) sections.

Once the preliminaries are concluded, the work of the different sections will be entrusted to a special commission, and when there are decisions to be made, the matter will be laid before a plenary meeting.

Thanks to these measures, it is hoped that the region of the Amur will be transformed and rendered more hospitable for the new colonists than it has hitherto been.

SWITZERLAND.

THE SUPPLY OF FRESH MILK. — *L'Agricoltore Ticinese*, Locarno, No. 10, March 11th. 1916. — *Journal d'agriculture suisse*, N. 11, March 14th., 1916.

The Swiss Department of Public Economy convened for March 1st. a meeting of representatives of the milk-producers, of the Swiss Milk Industry Society, of the cheese dealers, of the consumers, and of the condensed-milk manufacturers. Some representatives of the cantons were also present.

The object of the meeting was to discuss the milk-supply in Switzerland from the 1st. of May onwards. The agreement arrived at will remain in force for a year.

The producers will be paid for the milk at the rate of 20 ½ centimes per litre; at a maximum, 21 ½ centimes par litre delivered at the place of consumption.

The most important item of the agreement is the following: To render possible the payment of the price fixed, the Federal Government will give to the Dairy Associations which sell milk at this price a subsidy of ½ centime per kilogram, to be paid out of the taxes payable to the Federal Government on licences to export dairy produce and out of that part of the profit on the business of the Union of Cheese Exporters which is payable to the Government.

The proposals on these lines met with the approval of the meeting.

NOTICES OF SOME RECENT PUBLICATIONS CONCERNING AGRICULTURAL ECONOMY IN GENERAL.

ARGENTINA.

PASI (ANTONIO B): LA ESCUELA EN EL CAMPO. (*The Country School*). Rosario de Santa Fé, 1915. Imprenta y Fotograbado de Emilio Fenner. 8vo 37+8 pages.

Sr. Antonio B. Pasi, agricultural engineer, published the pamphlet under notice on the occasion of the tenth anniversary of the foundation in 1904, on his own initiative, of the first Itinerant Lecturership of Agriculture in the Argentine Republic — the first indeed, to be established in South America — which has rendered such signal services to the farmers of the country.

The pamphlet in question is confined to the exposition of some principles and rules upon which, according to the author, rural education ought to be based. The object towards which the ideas of Sr. Pasi tend is that of " transforming the rural school into an agricultural school," that is to say, of eliminating from the elementary education of country children, in so far as it is possible, all abstract conceptions, employing an essentially practical method and using examples drawn exclusively from agriculture.

In all matters which form the subject of elementary education in the country there should be (says the author) a frankly agricultural atmosphere, the explanations of the master constantly having reference to the agricultural application.

Thus the rural schoolmaster should practice his pupils in writing letters and compositions relating to the purchase and sale of livestock and agricultural produce; in arithmetic he should set problems relating to land measurement, the weighing of grain, the cost of agricultural labour, etc; in geography, he should deal with matters specially relating to production; in speaking of scientific progress, he should speak only of what relates to the country.

In this way, Sr. Pasi is of opinion, without special effort on the part of the pupil, without altering the existing scholastic programmes, the lessons will become a germ of agricultural education and will constantly recall agriculture to the country child, inculcating in him the principal elements of the surroundings in which he will have to develop his aptitudes later on.

UNITED STATES.

VAN DYKE ROBINSON (EDWARD): EARLY ECONOMIC CONDITIONS AND THE DEVELOPMENT OF AGRICULTURE IN MINNESOTA. University of Minnesota Studies in the Social Sciences, No. 3.

This study of the progress of agriculture in Minnesota from the pioneer stage down to the present day is much more than the ordinary university serial publication. In size alone it is exceptional — 306 folio pages with numerous maps and tables — and it is exceptional, also in method and fulness of treatment. Two introductory chapters treat respectively of the Physical Features and Climate of Minnesota and Early Travel, Trade and Transportation, and the four chapters which follow deal in turn with Pioneer Agriculture 1838-1860, Specialised Wheat Farming 1860-1880, Diversified Farming 1880-1900 and Recent Tendencies in Agriculture.

The original intention of the author was to prepare a statistical atlas which would in itself be a record of the development of agriculture in the State, but as the work advanced its scope extended. It was realised that the statistical data collected needed to be interpreted, since the facts were drawn from many different sources and, presented without explanation, would have been more likely to mislead than to inform. The need for explaining the figures led to enquiry in many different directions and it became necessary in many cases to consult persons who had knowledge of the facts at first hand. The result achieved fully justifies the time that has been spent in the preparation of the study.

The author has added a Bibliographical Note in which the chief sources of information are indicated.

MC RAE (HUGH): VITALIZING THE NATION AND CONSERVING HUMAN UNITS THROUGH THE DEVELOPMENT OF AGRICULTURAL COMMUNITIES. Annals of the American Academy of Political and Social Science, Vol. LXIII, January, 1916.

This is one of a series of articles in the issue of the *Annals* for January, 1916, an issue which appears under the general title of "National Industries and the Federal Government." Incidentally it is the only article which deals with agriculture, and, as there are other twenty-five articles dealing with commerce and finance, one gets the impression that the recognition of agriculture as a national industry was an afterthought upon the part of the editors.

The writer of the article, without descending to particulars and discussing ways and means, advocates the more systematic colonisation and cultivation of lands now lying waste. Much, he thinks, might be learnt from the organisation of large manufacturing industries, and applied to agriculture. This implies a large labour force directed by a small staff whose

business it is to think and to plan; and this in turn implies work in communities.

In brief the article is a plea for the dedication of higher scientific and organising ability to the service of agriculture. The writer holds that there is no sphere in which such higher ability would yield equal results, either in material wealth or in moral satisfaction.

GREAT BRITAIN AND IRELAND.

WOLSELEY (Viscountess): Women's Work on the Land. "Nineteenth Century", No. 467, January 1916, pages 126 to 138.

The question of women's work on the land is treated in this article from two distinct points of view — the need of the moment and the need of the immediate future.

The need of the moment is for women workers who can carry on all farm work, such as milking, butter-making, dairy-work, hay-making and harvesting, that is likely to come to a standstill owing to men having enlisted. For this work the women required need not necessarily be sufficiently gifted or well educated to be capable leaders of others, but they should be active, accustomed to country life, early risers and hardened to all weathers. They are urgently wanted for farm work of all kinds that can be successfully carried out under orders after a short course of tuition, restricted in some cases to a few weeks, in others to a few months, so that valuable time is not lost.

In regard to the future, Viscountess Wolseley dwells upon the necessity of increasing home production and the part which women could play in doing so. From this point of view, the need is for educated, thinking women, possessing if possible some capital of their own, who would take complete and thorough courses of instruction at recognised colleges and schools of agriculture and horticulture and would establish themselves later, when the war is over, in groups of farms, homesteads and markets-gardens to re-colonise England. "Above all," says the writer, "for success it is important to choose, if possible, young women of the upper classes, the daughters of Army and Navy officers and other professional men. They alone through their upbringing will possess a foundation of discipline, order and method whereby they will be able to direct the working-man and increase the yield of the land."

RUGGERI ALFREDO, gérant responsable.

INTERNATIONAL INSTITUTE OF AGRICULTURE
BUREAU OF ECONOMIC AND SOCIAL INTELLIGENCE

INTERNATIONAL REVIEW OF AGRICULTURAL ECONOMICS

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1916

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Part I: Co-operation and Association

DENMARK.

COOPERATIVE ABATTOIRS IN DENMARK.

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§ 1. ORIGIN AND DEVELOPMENT OF COOPERATIVE ABATTOIRS.

Towards 1880 a sudden change took place in Danish agricultural production ; the output of milk and butter became the most important factor in the agriculture of that country. Farmers were then called upon to solve the problem of the best use of dairy residues such as skimmed milk and whey, only a small proportion of which could be utilised in the manufacture of cheese.

After many investigations it was found that the most remunerative method of using them was as food for pigs. The development of pig breeding stands therefore in the closest relation to the dairy industry; for that reason, in view of the great expansion of the last named industry, pig breeding also made rapid progress after 1880. This is clearly evident from the following table:

Year	Number of Pigs
1861	303.970
1881	527.417
1898	1.168.493
1903	1.456.699
1909	1.467.822
1914	2.496.661

Since 1880 the number of pigs has increased almost fivefold; and in addition to the increase in quantity an improvement was obtained in the quality of the animals and their degree of fattening.

The increase in breeding naturally brought with it an increase in the exportation of live pigs and meat contributed to by the fact that as far back as 1880 the breeders had succeeded in gaining important foreign markets. The principal markets at that time were Germany and England. To the former country there were exported large, live well-fattened pigs averaging 112 ½ to 137 ½ in weight; to England on the contrary there was forwarded the meat of smaller, slightly fattened pigs, called *Sengschweine*, killed in Denmark, or (to a smaller extent only) sold alive in Hamburg and there slaughtered and re-exported to England.

Until about 1885 Germany remained the principal customer, and as almost all the animals were exported alive, the requirement of exportation abattoirs hardly made itself felt. Two of these had, it is true, been opened, one about 1850 and the other about 1860 but the animals slaughtered were mostly of Swedish origin.

Owing to the prosperous condition of pig breeding the abattoirs flourished; so that as early as the last years of the decade 1870-1880, and in the beginning of the following decade, several other slaughter-houses were opened, either by private persons or companies, in various provincial towns; yet up to 1887 there were only 8 abattoirs of any importance which exported their products, and their output, compared to that of the cooperative abattoirs of our own times, was very small. In 1887 however a sudden change took place in this state of things. In 1885 Germany had already increased the customs duty on imported live pigs from 2 ½ Marks to 6 per head. From the 1st January 1888, moreover, the city of Hamburg, which as regards import duties had remained outside the territory of the Empire, was incorporated therein, and this fact in particular exercised a decisive influence on the exportation of live pigs from Denmark.

Meantime, in the summer of 1887, an epidemic of diphtheria had

broken out among the pigs of some storage pens in Copenhagen, which furnished Germany with a pretext for prohibition of import of Danish pigs, which prohibition formed part of an entire series of protective enactments in favour of German agriculture.

It was therefore necessary to reorganise forthwith the exportation of pigs.

The exporters endeavoured in the first place to find new markets in other countries, for instance Holland, but found this did not pay them. There consequently remained only the English market, and under these circumstances breeders were compelled to address themselves to the 8 existing abattoirs, to which they had to sell the whole of their production. The abattoirs of course profited by the opportunity to pay the very lowest price for the pigs, and to exploit for their own benefit the difficult position of the farmers. Therefore, while the price of pork on the English market would have allowed of paying in Denmark from 54 to 58 öre per kilogram of live weight, the farmers only received from 34 to 36 öre ; this gave rise to strong discontent among them, and at the same time the advantages which they would derive from the establishment of their own slaughter-houses became evident.

The idea grew popular, among other things owing to the example offered by the cooperative dairies, which as it happened, during the preceding years, had spread throughout the country with extreme rapidity. Given the same conditions, the example compelled imitation, because the experience gained with the dairies had rendered the cooperative movement popular, having served as an education to all. These circumstances were of the utmost importance for the cooperative slaughter-houses, because the essential points above all were rapidity of action, and in the second place the unswerving loyalty of members to the society, since, in contradistinction to what had happened with the cooperative dairies, strong competition was certainly to be expected on the part of private concerns, very powerful as regards capital.

Above all rapidity of action was needed because the extraordinary profits realised by private slaughter-houses attracted a large amount of capital. In various places indeed new ones were being established. It was therefore essential to forestall the spread of the movement.

The cooperators indeed acted with such rapidity that for some time the number of slaughter-houses was out of proportion to the production of pigs, although the cooperative abattoirs had at the outset to overcome great difficulties.

In the beginning, indeed, capital and a capable directing staff were wanting. The big banks were reluctant to grant credit. The first cooperative abattoir was in fact founded by means of a loan granted by an agricultural savings bank and out of proportion to its restricted means. Nor was it possible to find technically qualified managers expert in the business, and accountants already employed in private abattoirs had perforce to take their place. Furthermore, competition was not long in coming. The private slaughter-houses immediately raised the prices for live pigs ;

they then proposed to amalgamate all Danish slaughter-houses, both co-operative and private, into a large company, dividing the profits equally among the shareholders and the suppliers, with some limitations to the share of the former. This largely-conceived scheme, supported by well known capitalists, was thoroughly examined and discussed by the cooperators. Opinions were many and divided. At last however after many negotiations the representatives of the cooperative associations came to the conclusion that the private slaughter-houses had over-estimated the value of their business and would have reserved to themselves excessive power in the proposed company. For this reason this original and broadly-conceived attempt to give the death-blow to the cooperative movement failed. These events occurred in 1890.

In the following years the private slaughter-houses had recourse to all the weapons of systematic competition ; the cohesive powers of the co-operative societies were however proof even against this attack, and it was soon clearly evident that they were in a position to face competition. What turned the day in their favour was that they were able to pay for the animals, allowing both for the killed weight and the quality, while private slaughter-houses could not adopt the same system, as they did not enjoy the necessary confidence among the breeders. On this method the price paid for each pig approximated with the utmost possible precision to the actual value of the animal, while the risk remained limited ; thus in the course of time the cooperative societies paid higher prices than the old businesses, which in some localities had moreover to allow for the risk of buying only inferior animals ; the best ones having been sold to the cooperative societies.

This system of payment was in turn a powerful incentive to improvement of the quality of the pigs and the breed, which improvement the co-operative associations likewise endeavoured to secure by means of energetic direct propaganda. The associations were thus in a position to sell products more and more select and uniform in quality and secured a large and faithful connection and an ever-widening market. These advantages in turn attracted an ever-growing number of members and thus assured to the associations the superior features of large undertakings, as for instance more perfect technical methods as compared with private slaughter-houses.

At the present day the cooperative slaughter-houses predominate over their adversaries. Their development is made clear by the following table :

TABLE I.

Year	Number of Abattoirs	Number of Members	Number of pigs supplied to coopérative abattoirs		Number of pigs bought not subject to societies restriction	Total number of pigs slaughtered	Average price per head (in kroner)	Aggregate value (in millions of kroner)
			Total	Per member				
1887	1	—	—	—	—	—	—	—
1888	5	—	—	—	—	23,407	43.7	1.2
1889	9	—	—	—	—	131,548	52.4	6.8
1890	12	—	—	—	—	147,455	53.0	7.8
1891	15	—	—	—	—	269,743	50.3	13.6
1892	15	—	—	—	—	297,641	58.1	17.3
1893	15	—	—	—	—	317,785	60.3	20.6
1894	17	—	—	—	—	385,731	52.5	20.2
1895	17	—	—	—	—	528,811	43.3	22.9
1896	22	57,000	—	—	—	626,854	40.8	25.6
1897	25	—	—	—	—	583,420	49.9	29.2
1898	25	—	—	—	—	601,039	48.8	29.3
1899	25	—	—	—	—	729,171	42.2	30.8
1900	26	63,000	—	—	—	675,200	52.2	35.2
1901	26	65,000	602,048	89	49,454	651,502	56.9	37.1
1902	26	66,000	—	—	—	777,232	58.0	45.3
1903	28	67,000	875,853	13.1	52,997	928,850	53.5	49.7
1904	30	70,000	1.073,996	15.3	59,425	1,133,421	48.08	55.5
1905	31	87,000	982,209	11.2	50,501	1,032,710	57.60	59.5
1906	32	93,000	1.006,221	10.8	45,426	1,051,368	61.75	64.9
1907	32	95,311	1.248,209	13.1	63,031	1,311,241	57.25	75.1
1908	33	102,856	1.490,897	14.5	58,653	1,549,550	53.75	83.3
1909	35	104,148	1.315,646	12.6	43,488	1,359,134	67.20	88.3
1910	36	110,370	1.362,217	12.4	43,796	1,406,013	74.00	104.0
1911	38	118,864	1.654,430	13.9	58,131	1,712,571	62.75	107.5
1912	42	127,094	1.838,137	14.5	81,614	1,919,751	70.00	134.4
1913	42	131,898	1.924,581	14.6	66,398	1,990,979	78.50	156.3
1914	45	140,716	2.336,757	16.6	91,447	2,428,204	75.00	182.1

In the first five years following on 1887 there were therefore founded 15 cooperative slaughter-houses, a sufficient number for that time, when the competition of private slaughter-houses was a hindrance to every new undertaking of the kind. Towards the middle of the decade 1890-1900, however, fresh associations were energetically formed, and in the last decade the increase was constant, being indeed more energetic during the last two years, owing to the great development of pig breeding.

There are at present 46 cooperative slaughter-houses, apart from one which devotes itself exclusively to slaughtering and exporting beef cattle.

The average number of partners per association has slightly increased; for this reason, and because breeding is prosperous, the quantity of pigs delivered to the societies and re-sold by the latter has grown in greater proportion than the number of undertakings.

At the same time the private slaughter-houses, notwithstanding the increased number of pigs, show a retrogression not only relatively but absolutely, as may easily be seen for the last few years from the following table:

TABLE II.

Year	Number of Pigs from	
	Cooperative Slaughter-Houses	Private Slaughter-Houses
1907	1,307,120	557,116
1908	1,546,029	585,193
1909	1,361,890	504,490
1910	1,407,685	425,644
1911	1,725,532	479,573
1912	1,922,828	491,542
1913	2,000,154	394,223

The majority of slaughter-houses also receive from their own members or buy oxen, calves and sheep for slaughter; there are indeed two small cooperative slaughter-houses which devote themselves principally to the slaughter and export of beef cattle, but generally this branch of the industry is of relatively small importance. Indeed the total quantity of beef cattle killed fluctuates constantly between 40,000 and 50,000 head of a value of 6 to 10 million kroner.

Finally there are 7 slaughter-houses which also engage in the exportation of eggs, and during the last few years sold about 2 ½ million kilograms of same of the value of 2 ½ to 3 million kroner.

We may now, on the basis of official statistics of agricultural cooperation, give a summary of the number of members in relation to the quantity

of pigs available throughout the country, and of the quantity of pigs possessed by cooperative slaughter-houses in relation to the total number of pigs in the country.

According to the cattle census of 1909, among rural land holders who engaged in pig breeding :

86,510 with 936,866 pigs were members of cooperative slaughter-houses.
95,242 » 523,241 » were not members of cooperative slaughter-houses.
As to 6,583 » 17,595 » no particulars were available ; in all there
were 188,335 » 1,467,822 pigs.

Apart from the few farmers as to whom there was no information, 47.6 % of land owners with 63.9 % of the total number of pigs in the country, formed part of the cooperative slaughter-houses.

Distributing the businesses according to their size we find the same division as in the cooperative dairies. The tendency to cooperation is greatest among the medium land holders ; small farmers, on the contrary, chiefly fatten a couple of pigs per year, kill them at home and consume the meat in domestic use ; they therefore feel no need to become members of a co-operative slaughter-house. Among large holders likewise there are also several who have hitherto kept aloof from the co-operative movement.

The facts set out above are brought out clearly in the following table, which gives the number of farmer land owners comprised in the cooperative slaughter-houses, divided according to the size of the holdings.

Size of holdings	Members of associations				
	Absolutely		Relative percentage		
	Owners	Pigs	Of the total number of undertakings	Of the total number of pigs	
				1909	1903
Less than 0,55 hectares	749	2,682	6.6	12.8	7.9
From 0,55 ha. to 5 ha. . . .	18,500	76,816	39.3	48.4	35.5
» 5 » » 15 » . . .	24,030	170,204	52.6	61.2	47.2
» 15 » » 30 » . . .	21,589	272,201	62.2	71.2	58.8
» 30 » » 60 » . . .	15,238	274,587	64.9	73.6	62.2
» 60 » » 240 » . . .	3,773	91,090	56.7	63.4	49.4
Above 240 hectares . . .	211	17,795	38.3	45.4	40.8
Total . . .	84,090	905,375	49.6	64.9	51.6

In all the groups the participation in the cooperative movement underwent a great increase from 1903 to 1909, and the progress was likewise maintained afterwards, as is evident from the notable increase of the membership of cooperative slaughter-houses set out above. The increase has been greater relatively in the group of small holdings.

On comparing the percentage of the farms belonging to members of the cooperative slaughter-houses and those of the pigs reared on them, it is constantly observed that the number of pigs per property is greater than that on properties not forming part of cooperative associations.

This fact, expressed in absolute figures, is made clear by the following table.

Size of holding in hectares	Average number of pigs per holding	
	Belonging to a cooperative abattoir	Not belonging to a cooperative abattoir
Less than 0,55 hectares	3.6	1.8
From 0,55 ha. to 5 hectares	4.2	3.4
» 5 » » 15 »	7.1	6.1
» 15 » » 30 »	12.6	11.0
» 30 » » 60 »	18.0	15.9
» 60 » » 240 »	24.1	21.1
Above 240 hectares	84.3	72.8
Total	10.8	8.2

The difference is of course greater in small holdings, but in the larger holdings too it is by no means small, from which it may be concluded that participation in cooperative slaughter-houses is greater in proportion as pig breeding is of more importance to the farm. The more considerable additions to the membership of cooperative slaughter-houses noted during the last few years is certainly due in part to these facts.

§ 2. Internal and central organisation of cooperative slaughter-houses.

The cooperative slaughter-houses are in a much greater degree than cooperative dairies, powerful industrial undertakings, which demand large capital for their installation and working and have a turnover running into millions of kroner; the fundamental principles of organisation however are identical. Here too we find the obligation on the part of the member to deliver to the association the whole of his production, joint liability, and equality of voting rights, regardless of the quantity of products sup-

plied to the association or the capital contributed. There are however some special features due to the extent of the organisation and the greater and more concentrated risk. The features consist chiefly, in all cooperative slaughter-houses, in the method on which the greater part of the capital is procured ; and in some slaughter-houses also in the system of representation and the distribution of responsibility and liability.

In view, finally, of the extensive character of the undertaking and the large amount of business, the technical manager appointed by the board of directors occupies a much more independent and influential position than in small societies, in which the administrative board likewise deals with technical details and can check the entire business.

Both from the technical and economic point of view cooperative slaughter-houses are bound to organise themselves on a large scale in orde that exportation may yield a profit.

The foremost condition indeed, in order that the slaughter-house may yield a profit, is that it shall have secured for itself in advance an adequate supply of pigs, so much so that about 1880 an undertaking had to close down for want of sufficient foresight in this respect. For the rest the limit is not every high : 10,000 pigs per year distributed equally over the entire year would be sufficient to meet the competition of private slaughter-houses ; some associations in truth began with even less.

As a matter of course however, the larger undertakings have the bigger profits. Experience has not yet indicated a maximum limit in this respect. For instance a cooperative association which in 1914 had slaughtered 183,000 pigs, was under the necessity of opening a branch without affecting the unity of organisation or of economic management, and several concerns slaughter more than 100,000 pigs per annum. The railways furthermore render it possible to extend in a very great degree the circle of membership, so that the question of transport does not as a rule set a limit to the extent of the undertaking. Generally however, the sphere of activity of a cooperative slaughter-house extends over an area of 20 to 25 kilometres. These associations were divided as follows in 1913 according to size :

Number of Pigs slaughtered	Number of Associations in 1913
From 10,000 to 20,000	1
» 20,000 to 30,000	8
» 30,000 to 40,000	3
» 40,000 to 50,000	2
» 50,000 to 60,000	5
» 60,000 to 70,000	2
» 70,000 to 80,000	3
» 80,000 to 100,000	4
100,000 and over	3
Total	42

The association with less than 10,000 pigs engages chiefly in the slaughter of beef cattle. In 1913 the pigs slaughtered averaged 49,000 per association, corresponding to a capital turnover of about 4 million kroner. The average membership was about 3,300 and the starting and working capital about 540,000 kroner per association. The capital is chiefly formed by loans contracted with various banks or saving banks. The capital borrowed was 190,000 kroner per association, serving usually to form the entire starting capital and in certain cases, part of the working capital as well. In most instances however the latter is formed in part by the net profits and in part by a special appropriation per head of cattle or kilogram of meat supplied by the members. In this way there were collected funds estimated at about 225,000 kroner per slaughter-house. The majority of the associations furthermore are gradually accumulating a reserve fund, a redemption fund, and so forth. The loans contracted by the associations are guaranteed on a two-fold method by the organisation: by joint liability among the members and by the obligation imposed on them of delivering their products to the association, which obligation ensures the continued existence of the latter. In one case alone is the joint and unlimited liability of the partners replaced by a limited liability, but to the obligation of delivery there is no exception. This obligation passes direct to the heirs. In case of sale of the property however the new owner is at liberty to remain in the association or to release his property. The obligation lasts generally for a certain number of years, from 5 to 10, and is renewed with a brief period of notice. The subject of the obligation, however is not always the same, there being usually excluded young pigs, and pigs below a given weight or a definite age, and also sows and big pigs unsuitable for export. All the other pigs may only be sold to the association or to other members, who in their turn undertake the obligation to sell to the association. The members may slaughter at home only such quantity of pigs as is required for domestic use, and may only sell them when the slaughter has taken place at the place of production.

Infringements of these rules are punished by fines, usually of 10 kroner per pig sold in conflict with the rules.

Furthermore, the member must, within certain limits, take upon himself a guarantee for the liabilities of the association. In some cases the guarantee is put at a fixed sum per member, for instance 50 kroner; elsewhere it is proportional to the extent of the property or to the number of pigs raised or both; in a few cases only must it be actually paid in.

In the early days of the movement the right of the member to the assets of the association was in many cases commensurate with the amount of the guarantee offered, so that the association was then similar to a share company; this system however gave rise to a strong agitation among the members in proportion as the capital was redeemed. The question was keenly debated and finally almost everywhere the pure cooperative system was adopted under which the property rights of the member are in proportion to the number of pigs transferred to the association or to the sum received by the association for the goods sold.

For the rest, the relations between cooperative slaughter-houses and supplying members may be regulated in various ways.

Sometimes the by-laws provide that the assets of the association, clear of all encumbrances, must be divided among the members when passing over to a new financial period; at other times they direct that the amount shall be used for the issue of interest-bearing non-redeemable bonds; at other times finally they stipulate that the rights acquired by the members in a certain period shall carry interest and be paid off gradually in subsequent periods.

Usually the members resident in one and the same commune form distinct groups with regard to joint liability so that the liability is divided among the communes in proportion to the total of guarantees subscribed; in 11 associations however the liability is unlimited and equal for all members. The liability is not limited to the amount of the guarantee; only one association has adopted this system.

In the early days joint and unlimited liability was of great importance when the contracting of a loan was in question; to-day, when these undertakings have successfully withstood the test of time, it is no longer necessary. In point of fact the association just mentioned encountered no difficulty in procuring the necessary capital.

The business of the associations is dealt with by the management and the general meeting of members. In some concerns, particularly those on a large scale, there are appointed to the management in the several communes the so-called *trustees*, whose duty it is to make themselves useful to the management by safeguarding the interests of the association in the commune where they reside, watching over the due fulfilment of the obbligation of sale on the part of the members, and so forth.

The board usually consists of a rather small number of persons relatively to the size of the association, for instance from 6 to 8 members in addition to the chairman. It has the power to contract loans up to the aggregate amount of the guarantee, and it appoints the higher officers, the manager, accountant and cashier. Minor employees are appointed and discharged by the manager.

On the whole the Board has very wide authority. Its members are entitled to repayment of travelling expenses but receive no salary with the exception of the chairman; to whom as a rule a small remuneration is paid for the work, often very laborious, done on behalf of the association.

The general meeting elects the auditors, whose functions (which are remunerated) consist not only in the audit of the annual balance sheet but also in a monthly, and often weekly, examination of the books and monthly checkings of position as to cash.

Disputes between the association and supplying members must be submitted to an arbitration court consisting as a rule of three to five members, two or three of whom are elected partly by the general meeting and partly by the Board for one year, the others being appointed by the members or suppliers concerned.

The by-laws generally contain provisions with regard to the formation

of the reserve fund and often the annual paying off of a proportion of the debts of the association. The by-laws mostly also include some rules concerning the supply of pigs and the payment of accounts ; usually however it is left to the Board to arrange this matter in its details.

Generally the members residing at some distance from the slaughter-house, for instance 10 to 15 kilometres, are bound to deliver the pigs at the slaughter-house ; when they live farther away delivery may be made to the railway station ; but if they convey the pigs to the slaughter-house the association pays the cost of railway carriage or allows a proportional indemnification. Many slaughter-houses, however, have opened special delivery depots in various localities, as well as at the railway station ; and take upon themselves the corresponding costs of transport. In this way the supplier always receives the same price for his goods whether he lives near or far, and the location of the slaughter-house no longer matters. This condition is indispensable in order to make sure of obtaining the necessary number of members when founding the association, and to compete on equal terms with the other slaughter-houses and prevent possible dissension among the members.

On delivery the supplier usually receives a sum on account ; for instance $^4/_5$ths of the value of the goods calculated on the basis of the price for live weight previously fixed by the slaughter-house. Sometimes the payment on account is made not by the slaughter-house but by the recipient of the goods, who is allowed a special remuneration for his trouble and the loss of interest. The recipient is for the most part a big merchant or the distributor of the cooperative association of consumers. The final settlement of the account is made everywhere on the basis of the killed weight and quality. Pigs however which owing to tuberculosis or other disease not easily detected before slaughtering, cannot be used for human consumption, are paid for on the basis of a special price not differing greatly from that for healthy pigs.

The pigs are weighed immediately after slaughtering, and classified according to quality in from 3 to 4 groups. The price is fixed on the basis of a weekly price list published by the association, per kilogram of killed meat of the particular quality. The payment made on account is then refunded to the consignee, and the balance remitted to the supplier by post. As stated however a deduction is often made, usually 2 öre per kilogram of killed weight, which is returned at the end of the year in the form of profit.

The classification, which is everywhere entrusted to the manager, is not carried out on absolutely identical principles in all slaughter-houses. True, the fundamental guiding principles are the same, but the associations may take into account the special requirements of their clients.

The cooperative slaughter-houses have combined into a federation entitled « *De samvirkende danske Andels-Slagterier* » (Union of Danish Cooperative Slaughter-Houses), which in 1897 took the place of an organisation in existence since 1890.

The federation, which has been joined by all the cooperative slaught-

er-houses, has its seat in Copenhagen, and has for its object to defend the interests of the federated associations towards Parliament and the Government, and, by collective action, to procure the greatest possible advantages for its members in respect to :

a) the question of transport at home and abroad ;

b) the solution of problems of a scientific and practical nature ;

c) the introduction, possibly by means of comparative tables, of such uniform rules in the assessment of the prices, as to be able to calculate in advance the net prices obtained ;

d) mutual aid in case of strikes or other labour troubles.

The union is organised in such a way that the technical element, represented by the managers, plays a large part in its administration. Each abattoir elects a representative committee of 3 members ; the assembly of representatives forms the general meeting, to which all managers have admission but can only vote if they form part of the committee. The general meeting elects the Board, consisting of 7 members, of whom 2 at least must be abattoir managers.

This cooperation between the various associations has produced noteworthy results in more than one direction. First and foremost, the federaration has been able to act as representing the slaughter-houses towards Parliament, above all when it was a question of passing and applying the law of meat inspection. Both with regard to inspection of exported meat and that of meat sold at home, the central organisation of the cooperative slaughter-houses was of extreme importance, because it was able to set out their demands with the weight of its own authority. The inspection of exported meat, enacted in 1894 and afterwards extended and made more severe by a series of subsequent laws, is due to a large extent to the initiative of the cooperative slaughter-houses, and has proved to be one of the most effective means for improving the quality and the reputation of Danish pork abroad, and preventing unfair competition at home. Moreover, when communal inspection of meat sales was established — which did not concern slaughter-houses catering for export — the associations were compelled to defend the free sale of their products at home against vexatious inspections and taxation.

The Union, in order the better to be able to develop its activity in connection with experiments and consultations, has appointed a technical consultant to whose salary the State contributes 2,000 Kroner ; it has further taken the initiative in having carried out in the experimental laboratory of the Higher School of Agriculture a series of experiments on the keeping qualities of pork, on cold storage waggons, the utilisation of waste and by-products etc.

Collective work, however is rendered difficult owing to the keen rivalry existing between the various slaughter-houses managers, each of whom would like to obtain more brilliant financial results and reap greater fame. Even though the managers have no personal economic interest, this rivalry has nevertheless given rise to various drawbacks ; for instance in cutting and curing. It must be recognised however that some Boards may like-

wise be at fault in respect to these facts by reason of their wish to increase the profits of their own business to the greatest possible extent. The same thing happened when it was a question of fixing the prices per kilogram of killed meat, which were increased beyond measure by artificially lowering the killed weight, without increasing the proceeds actually obtained.

These circumstances have made it particularly difficult to apply uniform standards to the payment of purchases and to accounts, so as to allow of a direct comparison of purchase prices and business results.

The Union has therefore been unable up to now to prepare comparative statistics for the undertakings (as was done for dairies), which would be very useful, and is greatly desired by the directing Boards of slaughter-houses.

Nevertheless, the Union has energetically combated unfair competition and has secured good results in this direction. Thus, when in 1908 English importers made complaints as to the quality of Danish pork etc., and particularly of the excessive contents of salt and the cutting up which was over-favourable to the butchers, the Union took the initiative of sampling exported meat in order to remedy those mistakes which were brought to light by a series of comparative investigations. It was then determined, with the consent of all the associations, to carry out regularly an examination of the meat with regard both to curing and cutting. This examination is carried out by a committee of three managers at irregular times, fixed by the office, without the knowledge of the business concerns. The result remains secret, but each slaughter-house is furnished with a statement showing the classification obtained.

The idea of these inspections arose in consequence of the butter exhibitions held by the dairies. The method has proved highly effective in improving the quality and uniformity of the products supplied by the co-operative slaughter-houses.

The Union has also endeavoured to obtain a uniform quotation for the meat throughout the country, but hitherto without success, because the slaughter-houses of Zealand, in view of their vicinity to the capital, desired to retain a distinct quotation. On the other hand the abattoirs of Jutland and Funen have agreed upon a common quotation.

The Union in other things likewise has taken the initiative in promoting cooperation among the various abattoirs. In 1899 for instance it succeeded in securing common insurance against marine loss, the effect of which was to reduce premiums one half and even more to some abattoirs.

After the law on workmen's insurance of the 7th January 1898 the confederated cooperative Danish Abattoirs founded a mutual insurance system for accidents to their own workmen; it comprises 32 undertakings and is administered by the Federation of Danish cooperative abattoirs. The latter likewise took part in 1909 in the foundation of the union of Danish Cooperative abattoirs in regard to labour questions which was joined by 30 associations. This Union is now entrusted with negotiations between the sociations and trade unions in respect to the wages and other conditions of work.

It should here be recalled that the managers of the abattoirs have organised themselves into an « Association of managers of Danish cooperative abattoirs » the object of which is to strengthen and develop comradeship among its members and to promote mutual aid and the advancement of the undertakings entrusted to their management. For this purpose regular meetings are held in rotation in those cities in which there are cooperative slaughter-houses ; studies of cooperative businesses are initiated, various technical questions are discussed, and information is communicated to the members as to sales, markets and manufacturing methods. The work of the association develops parallel with that of the Federation, and on more than one occasion has been in advance of it. The Association is also, naturally, the technical adviser to the Union, and in this capacity has on several occasions submitted memorials to the Government in connection with proposed laws relating to cooperative slaughter-houses.

In imitation of the Union for the exportation of butter formed among cooperative dairies, the cooperative slaughter-houses have formed various unions for the collective sale of their products abroad, the most important o which is the *Dansk Baconkompagni* (*Danish Bacon Company*) of Copenhagen, which at present comprises 14 abattoirs and engages exclusively in the sale of bacon in London and the south of England, and in the exportation of pigs' heads and feet. It deducts a commission of 2 % for the sale and a discount, of 5 % for instance, on the payments effected to the abattoirs earlier than 60 days after despatch of the goods, which despatch takes place through the *Danish Bacon Company Limited of London*, which in 1912 took the place of the association which had been in existence since 1906, as English legislation at present requires the form of a limited company.

The English company is under the control of the Danish one of which it is an offshoot ; it has a fully paid up share capital of 9,000 pounds, distributed among the abattoirs in proportion to the total of their business, and pays interest at 5 % on its own capital, while its shares carry no vote. To form the working capital the abattoirs leave their bills for goods forwarded in circulation for the requisite time. The net profits are divided one half amongst the English clients and the other half amongst the Danish abattoirs, in proportion to the total business concluded with the company during the year.

In the financial year 1913-1914 there were sold through the Company 440,404 pigs for the total of 1,800,000 pounds sterling. We shall refer again to the importance of the company for the trade in the meat of the pig and the position of such Danish meat on the English market.

It is now necessary to recall the fact that a number of abattoirs have jointly formed a sales office at Copenhagen, which in 1913 sold 3,300,000 Kroner worth of goods at the low cost of 2 %.

Important also is the Union for the collective sale of pigs' tripe, comprising 8 abattoirs, which together produce 20 or 25 % of the total production of tripe.

UNITED STATES.

THE MOVEMENT TO ORGANIZE CREDIT IN NORTH CAROLINA.

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§ 1. A New credit law.

The last Legislature gave the farmers of North Carolina the privilege of organizing cooperative banks, to be known as Credit Unions. The Credit Union, as provided for in this law, is a savings society which lends its funds for short-time purposes. It should not be confused with the land mortgage association, which lends not to help to operate a farm, but to purchase and develop land over a long period of years. This law also provides that the Superintendent of Cooperative Associations and Credit Unions from the Division of Markets of the North Carolina Agricultural Experiment Station shall help farmers to organize a Credit Union whenever twelve farmers shall sign a letter of application for his assistance. Any farmer is free to write to the Division of Markets to secure any one of the following articles, so far as there may be a supply of them on hand: "Credit Unions, Where to Form Them"; "To Increase the Supply of Credit Through Saving"; "Developing Credit in the Country"; "Lowes Grove Credit Union"; "Carmel Credit Union"; Recommended Form of By-Laws for Organizing a Credit Union".

Farmers in five school districts have already organized and incorporated Credit Unions. The Credit Union at the Lowes Grove Farm Life School began with thirty charter members, with $212 in stock and $101.75 on deposit. The Carmel Credit Union began with sixty members and took in on the opening day $228.50 from the shareholders and $150 on deposit. The farmers in the adjoining school district of Sharon, after three meetings, opened with thirty-six members, who paid $162 on shares and deposited $100. The Oakdale Credit Union, also in Mecklenburg County, was started in a three-teacher schoolhouse, with a membership of twenty-one and with $62.50 paid on shares.

This is a small beginning, but farmers should not be discouraged to begin with a small capital. The first co-operative bank in America, which

was established in Canada, began with a capital of only twenty-six dollars and forty cents. The first financial monthly statement showed a total of share capital and deposits in the bank of $242.80. These assets increased to $497.20 the second month, to $1,715.63 at the end of six months and to $4.935.54 at the end of the first year. After fourteen years of business the total assets of this cooperative bank reached $304,985. In that time, according to its organizer and administrator, Alphonse Desjardins, this bank made 7,208 loans, amounting to $1,396,916.

§ 2. Organized saving.

(a) *Gathering Idle Cash for Developing Country Enterprise.*

In most farming communities of North Carolina there are funds hid away which are doing no one any good. If all of the money of the country is brought together in Credit Unions it can be put to work earning profit for the users and developing business in the country in the same way that the city man's funds do for the city business. The town people of North Carolina do a business of $12,000,000 through their building and loan associations. These cooperative banking institutions enable many a city man to build a home for himself which he could not otherwise have done. The North Carolina Legislature put it within the power of farmers to do as much for themselves as city men are achieving all over the United States.

The Eureka Credit Union, at the Sandhill Farm Life School in Moore County and the Sinking Creek Credit Union, at the Derby Memorial School, open for business on March 16th and 17th. At these meetings men, women, boys and girls brought their money to become stockholders or depositors. If those under twenty-one become stockholders they will be expected to pay 25 cents a month until their shares are completely paid for. The shares are ten dollars. So this will take them forty months, or three years and four months, unless they are able to earn and pay more some months. All over twenty-one are required to make a payment of at least $2.50 every six months until at the end of eighteen months the share is paid for. The shares are to draw not over 6 per cent interest as soon as fully paid. All depositing money in the Credit Union will receive 4 per cent. It ought to be one of the proudest days of a farmer's life when he gets his pass-book and sees his own name written in it as a stockholder in his own bank. In the same book all of his deposits or loans are recorded, so he can see his balance at a glance.

(b) *Where to Begin Organization.*

What farmers may best organize a cooperative bank? Organization will be easiest where there are a number of farmers who own and operate two-horse farms. Some of the farms may be larger and some smaller. Ability to cooperate in the community is essential. If two or three farmers,

together with the school-teachers of a district, make up their minds that a Credit Union would be a good thing for the neighbourhood, there will be little difficulty in bringing the rest to the same mind.

Every Credit Union, so far, has been organized in a schoolhouse ; the teachers, children, demonstration agents, along with the farmers, taking stock.

(c) *The Work of Organization.*

Three to four meetings must be held before the organization can be perfected. One or two meetings are necessary to arouse interest and to spread abroad an understanding of the plan and purposes of organization. In the second meeting an organization committee should be appointed to meet and pass upon the by-laws recommended by the Superintendent of Credit Unions, and select five to act as a board of directors, three to act on the credit committee, and three for the supervisory committee. The action of the organization committee must be approved by the members at the third meeting. A set of books, with all necessary forms for doing the business of a credit Union, should be ordered at this time. They may be purchased for $11 for fifty members and $19 for one hundred members.

Between the third and fourth meetings two copies of the by-laws and organization certificates should be acknowledged before a notary public and approved by the Superintendent of Credit Unions. He will file one copy of each in the Division of Markets and return the duplicate copies to the treasurer for filing with the Clerk of the County Superior Court. This done, the work of incorporation is completed. The cost of this procedure should not exceed one dollar for notary fee and three dollars for recording and filing with the Clerk of the Superior Court. At the same time the notary may swear in all officers and members of the board to directors and of all committees. The board of directors should either secure a bond for their treasurer from private individuals in the neighbourhood or from a bonding company. In the latter case it should not cost more than five dollars for the first thousand dollars and a lower rate for each succeeding thousand. This bond insures stockholders and depositors against all losses. It should equal the total amount which the treasurer will handle during the year.

The fourth meeting is the day for opening for business. It should be a grand rally day. All idle cash should be brought in to pay toward shares or put on deposit. If it is expected that the money will be left in the Credit Union for a long time, it might be well to pay it upon shares, but if not it should be put in the Credit Union upon deposit. The share capital can be drawn out, but thirty days' notice may be required. The share capital should be made as permanent as possible.

Books and forms should all be gone over to inspire the members with confidence that the Credit Union is prepared to do business in a business-like way. At this and at succeeding meetings everything possible should be done to explain to members their privileges and duties. The Superintend-

ent, or his assistants by law, is authorized to examine Credit Unions to stop any bad practice and to help them to apply the best methods of banking.

(d) *Expenses of Operation.*

Like a bank, a Credit Union receives deposits from everybody; unlike a bank it lends only to members; unlike a bank, it does not lend for foolish purpose, however good the security may be; and, unlike a bank, the running expenss of a Credit Union are very small.

In some of the North Carolina Credit Unions, like those in Europe, the treasurer serves without pay the first year. If the is a school-teacher he may consider the work as one of his duties. He is teaching the practice of cooperation rather than merely preaching it. At the same time, through the Credit Union, he is organizing the whole school district to work with him for the upbuilding of the community. His school, like a city school, is made thereby a neighbourhood center for organized effort. Then the treasurer is only to give a few hours of one day a week to the service of a Credit Union. During this time it is understood that all deposits, payments on shares and withdrawals are to be made.

A large part of the work of the organization is done by committees, especially by the credit committee, whose members all serve without pay.

(e) *Farmers Organized to Borrow at the Legal Rate.*

Any member who is industrious and pays his debts should be able to borrow from a Credit Union, provided his loan it to be used for productive purposes, but only for productive purposes which will help pay the debt. The character of the borrower himself is the prime security. Two indorsers are required to sign the note as simply so much extra security to safeguard the Credit Union. This is where the cooperative spirit comes in. Farmers, as well as business men, will not be found lacking in this regard especially as their action will strengthen and insure the success of their own organization.

The writer was once asked, in a meeting for organization, to give an example of how one would obtain a loan from a Credit Union. The question took this form: "Suppose a farmer wished to borrow money to buy an ox, what would he do?" The answer was, he should fill out one of the Credit Union bancs, stating the amount and purpose of the loan and hand his application to the treasures, who would pass it on to the credit committee for consideration. The credit committee, however, would make short work of this application, because an ox to work a farm would not add to its earning capacity; neither would an automobile for pleasure. Loans are, in the main, for productive purposes — for purchasing improved plows, labor-saving machinery, improved livestock and better mules. Thus, a Credit Union becomes a society for the promotion of agriculture.

Undoubtedly, the need for loans will be greater than the amount of funds which can be gathered at the beginning. For this reason, the Divi-

sion of Markets is planning to help the different credit committees to find out what loans will do the most good and at the same time work out plans to satisfy these needs as far as possible.

In the first year of the activities of a Credit Union the shorter time loans for four months to a year should be given preference to those for longer duration. The longer time credit cannot be realized upon, while the shorter time loan can be renewed, if possible and desirable. The length of time for which a loan should be granted will depend upon its purpose and the system of farming practiced. It takes a farmer longer to get full returns from a mule or plow than from fertilizer. A dairy farmer might be able to pay in a month, when a cotton farmer might require six months to a year.

(f) *Cooperation of Banks.*

The Credit Union is the patron of a commercial bank in two ways. Like a building and loan society, it selects a bank to deposit its funds in. Four banks bid for the business of one Credit Union. All Credit Unions have so far received sympathetic cooperation from the banks generally. A Credit Union should be treated as one bank treats another bank. The most favourable terms at present would be for Credit Unions to receive 4 per cent on their daily balances and be able to borrow from a bank at 5 per cent. One banker remarked : " We have plenty of money to lend farmers, but no adequate means for getting it out to them. Your credit committee provides the proper machinery for placing money in the country ". One of the achievements of a Credit Union, according to his banker, would be to help farmers to practice those business methods which would assure them a lower rate of interest. What is more, it will put into practice that team work which will help the farmer to accomplish what he cannot individually. In working together for so great an end, the habit of cooperation will be developed. Community action will become possible, much to the enrichment or rural civilization.

GREAT BRITAIN AND IRELAND.

COOPERATIVE DAIRY SOCIETIES IN GREAT BRITAIN.

An article prepared by the "Agricultural Organisation Society" at the request of the International Institute of Agriculture.

In order to realise fully the remarkable changes which have taken place in the Dairying Industry in Great Britain, during the latter half of the nineteenth and the early portion of the present century, it would be well to take a brief glance at the conditions prevailing at the commencement of this period.

There were at that time two distinct forms of dairying in vogue (*a*) the town cow-keeper who produced and retailed milk in the towns and (*b*) the farmer who manufactured butter and cheese and reared stock.

The town cow-keeper who lived within the precincts or on the outskirts of the cities and larger towns, usually kept his cows in badly adapted and ill-ventilated cow-houses and under unnatural conditions, and in this way was able to guarantee a somewhat limited and more or less pure supply of milk for the urban population, but as the demand for milk increased the overcrowding in these town cow-sheds became a serious menace.

In the year 1865, the advent of the cattle plague depleted all the town dairies in the City of London and threatened not only to deprive the cow-keepers of their livelihood, but to produce a serious milk famine in the metropolis.

Owing to this serious condition of affairs, the late Sir George (then Mr.) Barham along with a few others conceived the idea of importing milk produced in the country districts into the metropolis. It was found that if the milk was cooled to a low temperature by passing it over capilliary water coolers, it could safely be carried for long distances and delivered in London in a perfectly sound condition.

Thus began a system which has since been taken up by all the larger cities and towns in the British Isles, and has naturally altered the position of the dairy farmers in both town and country. Indeed to-day one might almost say that with some few exceptions, the town cowshed is to all intents and purposes, a thing of the past.

In the country districts at the commencement of this period, butter or cheesemaking and stock raising were largely carried out in accordance with the suitability of the particular districts. Each farm made its own butter and cheese and as a consequence there were varying qualities produced, good, bad and indifferent, chiefly the latter. This system of dairy farming of course did not encourage winter milk production, it being as

a rule arranged that the cows should calve in the early spring so that the milk was produced under the most natural and economic conditions, and they were then gradually dried off in the autumn.

It will be seen therefore that at the commencement of the period under review, the town cow keeper and the farmer worked quite independently of each other, and this state of affairs naturally did not tend to develop co-operation in any form. So long as a reasonable living could be made by means of his own individual effort the farmer of that period did not recognise the necessity of combining with his neighbour for any purpose, but a combination of misfortunes arose, which altered his view with regard to this subject materially.

As already stated the cattle plague of 1865 and 1866 made the dairymen realise the fact that they must in the future be largely dependent upon the farmers for their supplies of milk, and as these supplies would necessarily be required throughout the year, the farmers were induced to pay more attention in arranging for a winter supply.

The importation of American and Canadian made cheese, of the Cheddar type, into this country some few years later, made the farmer suddenly realise that he had a difficult problem to face. This cheese whilst not equal in quality to the first class dairies of English cheddar was at least as good as the intermediate and lower grades, it also had the further advantage of being uniform in character, a result which was attained by the adoption of factory methods in its manufacture.

Hitherto, the British farmer had cherished the fond hope that dairy produce was at any rate free from overseas competition, but the improvements made in the rate of travelling and later by the installation of refrigerating machinery, dashed these hopes to the ground, and he had to cast round for some means to meet these altered conditions.

The position became so acute, that the council of the Royal Agricultural Society of England, on the motion of Lord Vernon, instructed its Secretary to obtain information as to the means which enabled the Americans to place large quantities of cheese on our markets, which was superior in quality to much which was made in this country.

This information appeared in the Society's Journal in the Spring of 1870 ; but the subject had also been discussed in many other parts of the country already, and the Derbyshire Agricultural Society made up its mind to give the American factory system a fair trial.

In 1870 a committee was formed, a building secured and equipped in Derby, and an American cheesemaker was brought over and a start was made.

The farmers were naturally somewhat nervous in undertaking what seemed to them to be more or less of an experiment, and a guarantee fund was established which secured them against receiving less than 6 $\frac{1}{2}d$ per gallon for the milk which they sent to the factory.

The cheese factors, who saw or thought they saw, in the new development a serious menace to their business, offered all kinds of opposition to the new scheme. This they were able to do, because they formed almost

the only channel through which the cheese could be sold. Little by little however, this difficulty has been got over, but during the earlier stages of the cooperative experiment, it hampered the progress of the scheme very much indeed.

It is interesting to note here the part played by the Derby Industrial Co-operative Society, in fostering the sale through co-operative channels of cheese produced by the Derbyshire and Staffordshire farmers cheese factories. The following figures demonstrate the success which has attended their efforts in this direction. In 1900 the purchases of English cheese made by this Society only amounted to £809 whilst in 1910 they purchased £8.530. Out of this amount £5.800 was paid to the Farmers' Cheese Factory.

In order to test the experiment further, it was decided to erect a factory at Longford, which was opened on April 8th. 1870. The experiment was thus carried out under both town and country conditions.

After the first year's working it was found advisable to adapt the American factory system to the making of a species of Derby cheese rather then continue making cheese of the Cheddar type.

According to the late Professor Sheldon in his book on « Dairying » the objects of the promotors of these early cheese factories were :

(1) To place the making of the cheese of the country in the hands of skilled men, who, having charge of the milk from several hundreds of cows, could be paid at the rate which skilled and intelligent workmanship properly demands.

(2) To relieve farmers' households of the sloppy untidiness, and their wives and daughters of the anxiety which are inseparable from home cheese-making.

(3) To reduce the cost of making cheese.

(4) To introduce into farming the beneficient principle of Co-operation.

(5) To raise the average cheese production of the land.

(6) To break the power of the middleman.

(7) To obviate dependence on incompetent dairymaids.

(8) To increase the profits derivable from dairy farming ; and

(9) To promote a healthy emulation, to create a feeling of mutual interdependence, to encourage freer intercourse and to introduce habits of system, enquiry, calculation, regularity and order among the farming circles of the country.

Following the example of the Derbyshire farmers many other factories were erected in Staffordshire, Cheshire, Somerset and Cornwall.

With the development of the milk trade to the towns and cities, however many of these factories had to cease operations, whilst others passed into the hands of wholesale milk dealers. Of the factories originally started only some half dozen or so continue in the hands of the farmers, and several of these only make cheese when there is no market for supplies of accommodation milk.

The two main reasons for the lack of co-operative development amongst dairy farmers during the next twenty years or so were : —

(1) the rapid decline in the price of cheese, and

(2) The enormous development of the sale of whole milk for human consumption.

In Wales, Co-operation was not applied to dairying until a later date.

The Advent of the Agricultural Organization Society. — Such was the state of affairs when the Agricultural Organization Society was inaugurated in April 1901, and by this time the enthusiasm which was in evidence when the factory venture was first put to the test had almost died out. The farming industry had also adapted itself in some measure to the altered conditions which had arisen, and therefore the need for co-operation was not felt to the same extent as in the early days of the movement.

It was not until the year 1903 that the first co-operative dairy societies were registered. One of these — the Nidderdale Society, Yorks, was formed for the purpose of retailing the milk belonging to its members in the town of Harrogate.

The other — the Scalford Dairy Society, Leicestershire — was formed for the purpose of making Stilton cheese under factory conditions. That this can be done successfully is evidenced by the fact that this Society has been awarded numerous prizes for its cheese at many of the principal English Shows.

Each succeeding year until 1908 the A. O. S. had the satisfaction of assisting one or more dairy societies to become registered, but the years 1908-9 proved to be barren ones, but a good deal of useful work was done which bore fruit at a later date.

In the year 1910 three of the Staffordshire dairy societies which were started soon after the introduction of the factory system became affiliated to the A. O. S. and in addition four other societies were registered.

The years 1911 and 1912 were remarkable because most of the societies which commenced operations during that period, did so on a much larger scale than had ever been attempted in England before. Several of these converted from 4,000 to 6,000 gallons of milk per day into cheese or into cream and milk powder. Besides this, some of them controlled other supplies to the extent of 40,000 gallons per day. Needless to say the formation of these societies improved the position of the milk-producing farmer in all parts of the country.

Wales opened her first co-operative dairy in the year 1913.

Strange to say the building which they occupied had been erected for a cheese and butter factory some 16 or 18 years previously. Previous attempts at co-operative dairying had been made in the Principality but these efforts were finally confined to butter blending only. The method usually adopted is for the butter to be made, but not worked or salted at the farm, the blending working and salting being accomplished at a Central Depot.

The shortage of labour, the growing dislike of farmers' wives and daughters to undertake cheesemaking at home, the decreased importations of

American and Canadian cheese, and the recognition of the great waste which is often occasioned by the milk market being flooded with milk during the flush season of the year — much of which is wasted and brings an unremunerative return to the producer — has once more caused the farmer to turn his attention towards co-operation as a means of minimising his difficulties.

The outbreak of the War has impeded the work to some extent and with our National affairs in such a state of upheaval it is small wonder that very little new work is being undertaken at the present moment. Efforts are therefore being directed towards consolidating the position of those societies which are already in existence.

On December 31st. 1915, there were in existence affiliated to the Agricultural Organization Society 38 co-operative dairy societies in England and Wales whose chief objects are the selling of milk and the manufacture of cheese. The chief varieties of cheese made by such societies are Cheddar, Cheshire, Derby, Leicester, Stilton, Wensleydale and Caerphilly.

The sale of whole milk is of paramount importance, in England and Wales, cheesemaking and buttermaking often being regarded as subsidiary adjuncts to it, and in this way it has a retarding effect on the general, adoption of the co-operative factory system for cheesemaking.

There are yet many different ways and districts in which co-operative dairying could be adopted with advantages and it is very pleasing to note that many of the societies who have commenced operations during recent years have done so because a society of which they have heard is doing good work. Example is more powerful than precept.

An interesting development in dairy co-operation has recently taken place in one or two districts, where urban farmers and those near large centres of population who had acted in the past as individual dealers have combined for the purpose of effecting economies in distribution, and it is likely that the successful results attained by these societies may induce others similarly situated to adopt the means of dealing with their difficulties.

During the year 1915 the milk industry of the country saw an important development. A large number of the wholesale dealers, with the object of reducing expenditure and to prevent competition between themselves, amalgamated into a combine, and registered as a company with a capital of £1,000,000. In face of this powerful organization it has been felt necessary by dairy farmers' societies that they in turn must adopt some form of federation if they are to successfully withstand these middlemen, and with this object in view, early in the present year a Federation of dairy societies was formed, with the object of uniting the interests of all dairy societies and producers of milk who have taken up cooperative methods of dealing with their produce, so that they may be in a better position to protect themselves against any attempt on the part of wholesale firms in the country to form a monopoly of the trade.

Dairy organization-Scotland. — In Scotland the system of dairying pursued, differs as in England and Wales, according to the locality and pro-

ximity to markets. The various systems adopted in that country may be classified under the following heads.

Retailers of milk. (1) These farmers who reside on the outskirts of large towns or cities and who for the most part retail their milk direct to the consumer. So far co-operative organization has failed to appeal to this class except in one or two centres, but with the present increased cost of production and the difficulty in obtaining an adequate compensating rise in price owing to the competition between the dairymen themselves, a desire for an organization on co-operative lines is becoming manifest.

(2) Those farmers situated from 4 to 7 miles from large centres of population who contract to sell their milk to retail dairymen. This milk is usually sold on yearly contracts and is conveyed by road to the dairy shops in the morning. Until lately the cooperative movement failed to appeal to this class, but with the spread of cooperative schemes in districts at much greater distance from the markets, the farmers within what may be termed the 7 miles radius of towns and cities are beginning to realise that they too, must adopt cooperative methods and thus minimise the cost of production and transport. The pressure of competition from organized farmers in localities less favoured as regards proximity to markets and means of transport, and with land at relatively lower rents, has now become a serious menace to those who at one time considered themselves more fortunately placed, and consequently paid higher rents for the privilege. Cooperative organization is now being taken up by this class of farmer in order that he may buy his requirements on more favourable terms, and substitute for individual delivery of milk that of motor transport in combination with his neighbours.

Butter making. Another system adopted by dairy farmers located near industrial centres and mining villages is that of butter making. It is usual in this system to *ripen* whole milk and then churn it into butter twice or thrice weekly, selling the butter and *butter milk* direct to the consumers. It is only a relatively limited number of farmers in each locality who adopt this system, and those who are engaged in it are, at the present time, content to pursue it on individualistic principles.

Milk selling and Cheesemaking. Under this heading is grouped by far the largest number of farmers engaged in the dairy industry in Scotland, which embraces the great cheese producing districts in West and South-west Scotland, where cheese is made during the summer months, whilst during the winter and early spring months the milk is sold on contract to city dairymen. There is also embraced in this group a large number of farmers located in districts at considerable distance from the great centres of population who sell milk all the year round, sending it by rail to the distant towns or cities. This latter class has not any alternative means of dealing with their milk, the farm buildings not being equipped with suitable butter or cheesemaking premises.

These farmers have for long enough been at the mercy of the city milk dealer, who taking advantage of their position bought their produce on contract at some pence per gallon less than that paid to those farmers who could deliver direct to the dealers premises. What was termed " railway milk "

was not deemed by the dealer as of so much value as milk which was delivered by cart at an earlier hour, although it is important to recollect that no difference was ever made in the prices charged to the consumer. It was amongst these farmers, that the Scottish Agricultural Organization Society first turned its attention in 1906. In that year the first cooperative milk depot was erected and others followed in rapid succession.

Under the schemes carefully prepared by the Dairy Committee of the S. A. O S. each depot erected under its auspices was equipped with cold storage and refrigerating plant of the most up-to-date kind, cheesemaking plant was also provided as well as cheese drying and storage accommodation. Equipped in this way, the committees of these cooperative depots were in a position to dispose of their thoroughly cooled milk to buyers at a considerable distance, the keeping properties of the milk being greatly enhanced through prompt cooling to a low temperature. They were thus no longer dependent on the demand from particular local markets, but were in a position to sell wherever the demand and the price was best.

Prior to the establishment of these cooperative depots the farmers sold their milk on contract to the city milk dealer, who had to take the farmers' whole supply irrespective of the often fluctuating demands of his customers. No doubt from this cause the milk dealer frequently suffered loss through at times getting over supplied. This element of risk of loss has been entirely eliminated since the adoption of the S. A. O. S. cooperative schemes. The milk dealers now get from day to day supplies of milk to suit their fluctuating demands, all surplus not required for immediate consumption being manufactured into cheese. When the milk demand is good, less cheese is made and vice versa. Prior to the adoption of this system, the price obtained by the farmers in these areas did not exceed an average of 6*d* per gallon throughout the year, indeed taking into account the relatively larger quantities produced during the summer months at a lower price, the real average price realised would be under 6*d* per gallon after paying railway carriage. A further deduction had to be made for milk butts, the cost of carting the milk to the nearest railway station, and the expense of loss of time incurred going to town to collect the monthly accounts. Bad debts were of frequent occurrence.

Under co-operative organization, improved business methods were introduced, better prices were obtained for the produce, each year shewing a slight advance on the preceding one, whilst the farmer was relieved of all risk of bad debts, and the charges above referred to. Having the depots conveniently situated in a central position, the cost of production and transport has been minimised and the labour at the farms rendered less irksome, it being no longer necessary to commence milking at the exceedingly early hours hitherto prevailing when the milk had to be sent to a distant railway station for transit by an early morning train.

Members of co-operative dairy associations found (1) that better prices could be obtained through acting in combination than individually and (2) great savings were effected through having less wear and tear of milk cans.

The farmers being relieved of the worry of marketing and collecting

accounts have more time to devote to the supervision and management of their live stock and farms, and this in turn has led to increased production.

In illustration of this, the following striking figures may be quoted; with no increase of membership, the turnover at one depot increased from £13,092.18.2. in 1912 to £14,485.3.11. in 1914, and at another from £13,998.12.2. in 1912 to £14,808.15.4 in 1914, and at another from £16,796.4.7 in 1912 to £21,355.19.0 in 1914.

It is pleasing to record that the better returns obtained by the farmers through the adoption of organized methods of marketing has not necessarily entailed increased cost to the consumer. The adoption of motor transport has also enabled the associations to effect considerable saving and relieves the city dealer of the necessity of taking delivery at the railway stations.

In order to avoid the risk of competition between the different affiliated dairy societies, the S. A. O. S. dairy committee found it desirable to promote a scheme of federation, the object of which is, without unnecessary interference with the individual liberty of the federated societies, to guard against competition between them and to promote such common action as may be generally advantageous. Under this scheme each Association is represented on the Joint Board by two delegates, and the S. A. O. S. by four representatives elected annually. This Joint Board or committee meets usually monthly, or at such times as may be found desirable in order to confer regarding matters of common interest and fix minimum prices below which the federated societies bind themselves not to sell.

Since the outbreak of War the federation has proved of great advantage to the dairy farmers and no difficulty has been experienced in marketing the products of the depots at prices 25 % and 50 % over pre-war values. On the other hand the unorganized farmer though complaining bitterly o the increased cost of production, has not been able to secure an increase of price to recoup his increased outlays for purchased feeding stuffs.

Cooperative intertrading. — The co-operative Movement in England and Wales may be broadly divided into two sections, the Agricultural and the Industrial.

The Agricultural Organization Society is the central propaganda and advisory body for the agricultural section, whilst the co-operative Union stands in a similar relation to the Industrial section.

For upwards of 45 years the Industrial or Distributive movement has interested itself in the problem as to the best means of applying the principles of co-operation to agriculture and has frequently discussed the question at its Annual Congress and passed many resolutions recording their appreciation and recognition of the work of the A. O. S. in its efforts to organize the Agricultural Industry on co-operative lines, and also expressing their desire for the establishment of close intertrading relations between the Agricultural and Industrial Movements.

At the Newcastle Congress held in 1909, papers were read by Mr. Nugent Harris, the General Secretary of the A. O. S., and Mr. J. Mastin of the C. W. S., on " Agricultural Co-operation and its relation to the Coope-

rative Distributive Societies ". It was resolved at the Congress that a special conference should be instituted to meet at intervals to discuss matters relating to intertrading and to consist of representatives from the following bodies :

The Farmers Central Trading Board.
The Cooperative Wholesale Society.
The Agricultural Organization Society.
The Cooperative Union.

This conference has been convened on eleven occasions and there can be no doubt but that the meetings have resulted in bringing the two movements into much closer trading relationship.

The governing body of the A. O. S. has always endeavoured to work in close connection with Industrial Movement and to establish relations between its affiliated societies and those affiliated to the Cooperative Union, and has added two organisers to its staff, one for the purpose of encouraging general intertrading and the other to develop intertrading in dairy produce.

An increasing number of industrial Societies distribute milk to their members and have special dairy departments for this purpose. Some of them receive and deliver daily quantities ranging from 1,000 to over 3,000 gallons of milk.

Where railway facilities permit, such societies form reliable and constant markets for the produce of agricultural dairy societies.

The Eastern County Dairy Farmers supply over 2,000 gallons of milk daily to the Stratford Industrial Cooperative Society, the Gloucester Farmers supply the Gloucester Industrial Coop. Society with all the milk it requires, and the Wensleydale Pure Milk Society at Northallerton supplies milk to most of the Industrial societies in the north of England.

These instances and others could be cited of a similar nature to shew how industrial societies are making use of the farmers' factories for the supply of more or less regular quantities of milk under contract.

The factories are also used as safety valves for the industrial societies who during the flush season divert some of their surplus supplies into the cheese factories. The cheese is then bought by the societies and sold to their members. A more usual method, however is to purchase *accommodation milk* at prices slightly above ordinary contract prices and thus compensate to some extent the fluctuations in the supply of milk by their suppliers and the demands of their members.

It will be thus seen how the factory is made useful to the industrial movement, and it can also be demonstrated that it is beneficial to the farmers. It is also useful to the State in utilising surplus milk and converting it into such valuable articles of food as cheese and pork.

Large quantities of cheese are purchased yearly by the Cooperative Wholesale Society and various industrial societies from the farmers' cheese factories.

Taken as a whole the work the intertrading branch between the two movements has made rapid progress and it is calculated that the total va-

lue of intertrading between the two now reaches and probably exceeds a quarter of a million pounds sterling.

There is evidence of still further growth in this direction and efforts are being made by both sections of the movement to further extend this important and interesting branch of cooperative work.

Lately the Co-operative Wholesale Society has proposed a scheme by which the purchase of supplies by individual industrial societies from farmers, dairy societies, and dealers would be supplanted.

It is proposed under this scheme that all industrial societies should place the purchase of their milk under the control of the C. W. S. The milk would then be purchased direct from the farmers and dealt with at convenient centres in factories which would be erected for the purpose. This, they maintain, would necessitate fewer societies putting down elaborate plant, and the individual industrial societies could then confine their expenditure to the general organisation of distribution to the consumers.

In those districts where farmers' dairy societies exist it is thought that the farmers factory should take the place of that erected by the C. W. S. when for unity of the whole body the industrial society should seek to put all their business at present done direct with the farmers dairy society, through the C. W. S.

It would therefore appear that the producers of this country are faced with two larger combinations — the private monopolists, who have settled their differences by amalgamating and the C. W. S., who aim at purchasing collectively for the whole of their industrial community.

The need therefore for some strong federation of all the dairy societies is manifest, if the Dairy Industry is to maintain its position.

RUSSIA.

POPULAR COOPERATIVE CREDIT INSTITUTIONS.

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Introduction.

In October last year Russian cooperation celebrated the 50th anniversary of its origin ; therefore half a century has elapsed since the idea of popular cooperative loan institutions began to make its way in Russia. This date coincides with the epoch of transition which occurred after the abolition of serfdom, when the remains of the primitive natural economy began to break up, and a new economic order arose on the basis of money currency, to which much greater functions were attributed than in the past.

The growing importance of monetary currency is imparting a new direction to the whole economic life of the country. The State requires in money from its citizens the taxes and instalments of payment for the lands allotted ; the communes require the same from their inhabitants. What was the use of the peasant having his granary filled with corn when the value of the latter could only be realised on the market ?

On the market henceforward is thrown and realised all that individual economy has produced. It is therefore necessary to remove restrictions on individual production, to intensify the latter, enhance the product and find new forms of production.

But for this the means are required, money is needed. The banks formed on behalf of the peasants had not, as we saw in the article published in the April *Bulletin*, been able in any way to meet the large demand for money which nevertheless required to be satisfied in some way or the other.

The movement began at the point of least resistance. The peasant had to apply to the usurer, the *kulak* (1), for assistance.

This assistance, however, could not be more than temporary and at some time was bound to bring about the bankruptcy of the peasant holdings.

The foundation of the first cooperative loan societies in Russia dates from this very period of time, so wretched for the peasant class.

§ 1. Origin of cooperative societies.

The merit of having introduced cooperative societies into Russia is due to a private individual. It was in October 1865 that S. F. Luginin, landowner and member of the Zemstvo, founded the first cooperative savings and loan bank on his hereditary estate in the village of Rojdiestvenski (province of Kostroma). He gave the society the sum of 1,000 roubles, without interest, and provided it free of charge with a building for the management.

The object of this institution is set out as follows in the first paragraph of its bye-laws :

(1) In Russian literally « the clenched fist » and in a figurative sense, « the usurer ».

The Rojdiestvenski Cooperative Deposit and Loan Fund has for its object to afford the inhabitants of the Volost of Rojdiestvenski the possibility of « earning interest on the money saved by them and obtaining loans on the best possible conditions ».

The capital proper of the association was formed by the contributions of the members. Each contribution was fixed at 50 roubles, to be paid to the fund in monthly instalments of 15 copecks.

Originally the loans could not exceed 50 roubles ; but the limit was subsequently raised to 120 roubles. The management of the Fund was in the hands of the general meeting of members. Current business was transacted by the Board and the Director, both elected by the meeting.

Apparently, however, the Director usurped all the powers, which was the reason of various mistakes made by the association.

In point of fact, in spite of the lengthy life of this institution, which still exists, it did not succeed in releasing the agricultural population from the yoke of the usurer, a proof of which is the fact that at this very day only 35 % of the population of that village (531 members) are in relations with the society.

It appears to have been completely isolated from the rest of the world, not availing itself of any of the innovations made in the organisation of loan banks. Such was the organisation and life of this body, which was the prototype of cooperation and of all deposit and loan banks in Russia.

The association, founded in this village of Rojdiestvenski, hidden away on the Volga, was not noted by any person at the time, nor did any newspaper record its existence. Only a few years later, when the first annual accounts began to be published, was public interest awakened, especially in Zemstvo circles ; the expected event had therefore happened. Several Zemstvos applied to the President of the Zemstvo of Kostroma, asking him to procure for them the bye laws of the association of Rojdiestvenski. The well known Prince Vassilchikoff, Luginin and others formed a group which began to take cooperation very ardently in hand, Meantime, among the public, the question which was the best form of popular loan institutions was discussed. Some said it was that carried on by the peasant banks which had already long been in existence and had stood the test of experience among the agricultural population. These banks, furthermore, coincided with the communal administrations, the Volosts, and in the latter finally all the peasants of the villages where they existed could take part, while the cooperative loan system was something new and untried, and presented the disadvantage that only the members of the cooperative society could obtain loans, and so on.

As against these objections, however, there was the undisputed fact that the agricultural banks and funds of a non-cooperative character had everywhere secured but scanty results, that many of them no longer carried on loan operations and were to be regarded as practically dead, and so forth, while on the other hand the cooperative society, with its joint liability and a judicious selection of members, offered greater guarantees of solidity than the communal funds and banks.

This technical dispute between the partisans of the two systems rendered the service of bringing into prominence various problems connected with the principal question, and leading to their thorough study, but its special merit was that it drew the attention of the public at large to the problem of cooperation, and familiarised it with this new conception.

The group of persons, at the head of which was Prince Vassilchikoff, now sought to create an administrative body, expert in its knowledge of cooperation, which might, with good will and on good methods, promote cooperation in Russia; and in order to increase its importance they desired it to be in relation, on the one hand with the Government and on the other with the Zemstvos, *i. e.* the most important and influential bodies in the rural district. For various reasons however, it was not possible to give this body such wide powers of self government, and it was created in 1871 as a section of the Imperial Agrarian Society of Moscow (founded in 1818), under the name of "Committee for Peasants' Deposits and Loan Funds and for Cooperative Societies of Producers". In that same year a section of the Committee was opened in Petrograd, which in the course of time became and remained for more than ten years the genuine promoter of the entire cooperative movement, while the Moscow Committee took a second place.

The direct objects which the Committee set before itself were:

To promote and found cooperative societies and guide them in their movement; to carry on propaganda among the public in favour of these new loan institutions, popularising their ideas; to draft model bye-laws of cooperative societies, study the rules and forms for the accounts of the funds, establish a uniform management, and in short, do all that was possible to ensure the prosperous development of cooperative societies.

We will now, first of all, explain the model bye-laws which were to serve as a basis for the structure of the deposit and loan Funds, and guide their operations.

Just like Luginin with his society, it was the object of the new bodies to provide loans for their own members and to facilitate their depositing their savings. Anyone possessing civil rights, regardless of the social class to which he belongs, may be a member of a cooperative society. In contrast to the peasants' communal banks, a cooperative society is a free association in which each person of proper moral behaviour and with a full sense of his duties is readily welcomed.

The economic organisation of the cooperative societies is based on the contributory share of the members and on their joint liability. These elements form their principal characteristics, and distinguish them from other undertakings.

Their liabilities are made up of the contributory shares of, or loans granted to, the members, and the reserve fund formed with the profits. They also receive savings deposits which may not in the aggregate exceed five times their own capital, and they have the power to contract loans with the object of increasing the working capital. The assets consist of short date loans (9 to 12 months) granted to the members, which must

also bear a certain proportion to the total contributions of the members. The loan is granted always on the security of a bill of exchange. At the end of the financial year the members receive a dividend on their contributions. The management of the society consists of the general meeting, which forms the supreme authority deciding on the most important matters, the board, consisting of three members, which deals with ordinary administrative business, and finally a supervising board which must watch over and check the whole of the affairs of the society.

It is evident from the foregoing that these fundamental features of the loan and deposit Funds are only a reproduction of the essential features of the loan associations of Schultz-Deliztsch, adapted to the new and special circumstances in order to give them greater strength. Their origin is nevertheless, even to this day, readily recognisable, and indeed in the grouping of the various loan institutions they are to-day still styled the Schultz-Delitzsch system (1). With regard to the joint liability which constitutes the fundamental feature characteristic of the cooperative society, it was not everywhere regulated in a uniform way. In some societies it was limited in proportion to the members' contributions; in the great majority of cases however it was unlimited. The liability of Russian deposit and loan societies nevertheless presents one singular feature. According to the legislation concerning peasants, it was impossible to recover debts by distress on the major portion of their personalty and realty. That is to say, the following are not subject to compulsory expropriation for debts:

1) the land assigned to the peasant on the emancipation of the serfs;

2) the implements indispensable for the cultivation of the soil:

3) the food products indispensable for the sustenance of his family.

But, one may ask, what is in practice the criterion for distinguishing that which is indispensable from that which is not

The reply is, that the boundaries between the two categories are not clearly marked out, and that hence there is a wide field for interpretations and disputes. And where, from the point of view of compulsory expropriation, the " indispensable " ends, precisely there perhaps it begins for the peasant.

From this legislation, however, it follows that the joint liability both of the members towards the association, and of the latter towards third party creditors, becomes somewhat problematic, while in order to serve as a safe basis for advances of funds, it should not lend itself to any discussion.

We shall have to speak subsequently of the consequences of this state of things, when we deal with the liabilities of cooperative societies; we may however say straight away that the reasons are to be found in the general

(1) See in the *Monthly Bulletin of Social and Economic Intelligence* for January 1914, the article on « Cooperation in Russia " by S. de Borodaieff, assistant director in the Ministry of Commerce and Industry in Petrograd.

economic and legal position of the peasant, and in the *mir*, which is gradually disappearing after the great agrarian reform of 1906 (1).

Such was the structure of the cooperative popular loan system. We must now examine it in actual operation, study its life and the factors of its development.

§ 2 Development of cooperation and factors involved.

Among the factors of cooperation in Russia while it was still in its infancy, the Zemstvos must be mentioned first and foremost.

Urged on by the Petrograd section of the Committee for promoting, Loan and deposit Fund societies, with its seat in Moscow, the Zemstvos, towards 1870 in the last century, made use of every means at their disposition to support and encourage cooperation.

Above all they constantly subsidised cooperative association with their own means ; they spread broadcast through the countryside booklets, proclamations, and other propaganda literature ; members of Zemstvos went in person to the villages to persuade the peasants of the desirability, indeed the necessity, of these associations. The times were favourable to the activity of the Zemstvos in the rural districts ; it was the period of *narodnichestvo*, that is the time when the Russian cultured and liberal classes endeavoured to interpenetrate and mingle with the people.

The youth of that period went with enthusiasm into the field and country to shake the hand of the peasant made a free man, the idealised *mujik*, and call him brother (2).

Whether it was here a question of an act of contrition towards the former " baptised property " (3), or whether there was likewise intermingled therewith a somewhat belated reproduction of the ideas of Rousseau, this apotheosis of the peasant had the useful effect of arousing public opinion out of its indifference towards the rural class generally, and inducing it to take an interest in the needs of the village, the Government on its part protected the cooperative movement from the outset ; thanks in particular to the activity shown by the Petrograd section of the Moscow's Committee.

Hence in 1872, cooperative societies were granted the right of obtaining loans from the Imperial Bank to the extent of five times the amount of the members' contributions ; they were also exempted from the payment of the stamp tax on bills of exchange, and the business tax was reduced in relation to them.

(1) See, in this Bulletin (No. 6 for 1915) the article " The Great Agrarian Reform ".

(2) " To my mind the most intelligent peasant in Europe is that of Northern Italy, but our *mujiks* can in many respects stand up to him "said a landed proprietor to Leroy Beaulieu, the author of a book " L'Empire des Tsars ", vol. 1, page 401.

(3) This was the name given by Alexander Hersen, the well known Russian writer, to the serfs.

All these measures brought about a rapid increase in the number of deposit and loan societies, as appears from the following table :

Year —	Number of Associations founded in the yeas —	Number of existing active Associations —
1865	1	1
1869	2	3
1870	13	12
1871	75	36
1872	101	101
1873	180	260
1874	176	389
1875	136	568
1876	202	645
1877	156	785
	982	2,500

In 10 or 12 years there were founded nearly 1,000 associations, of which 785 had already begun to operate; a truly remarkable activity if it be considered that it was an absolutely new thing. Unfortunately the development was not of long duration.

The same circles of the Zemstvos which had with so much zeal fought for the cause of cooperation, which had supported it with material means and had endeavoured in every way to encourage it, now, after the lapse of 10 years, their first enthusiasm having evaporated, took up a different attitude towards it. Why? It would be very instructive to investigate the cause of this change, but to do so we should have to go into various social and political questions which transcend the limits of our study. Suffice it here to say that the Zemstvos underwent the effect of a great disillusionment, that is to say, there was no correspondence between what had been believed to be contained in cooperation, what had been hoped for from it (that is, a universal panacea for all the ills afflicting the village), and what was actually obtained through its agency; apart from the further fact that, as was observed, in their own field of activity, that is, loan operations, the cooperative societies did not always come up to expectations.

The contributions to the societies' loan funds could only be paid by the richer peasants of the village, and of course they alone enjoyed the advantages of the societies, while the poorer peasants remained excluded from every benefit. It was also found that many members took loans from the associations and lent the money thus obtained to the poorer population, making them pay a very high interest; in this way the societies tended almost to promote usury.

The best institutions thus lose their value when they have not developed organically with the environment in which they are to operate, and be-

come discredited in the eyes of the public. This is exactly what happened to the deposit and loan funds in Russia towards 1880.

Furthermore, the State Bank, which up to 1870 had granted them loans for a sum of 5,000.000 roubles, began to restrict the credit, so that in 1901 only 65 associations were allowed to benefit by the loans remaining debtors for only 228.000 roubles. In justification of this policy it was said that the societies did not punctually repay their debts, and that many of them contrary to the articles and rules ot the Bank succeeded in converting the short date loans into long date loans by renewing the bills of exchange.

It emerges clearly from the following table that the deposit and loan funds after the first " foundation fever ", have been losing ground since 1878.

Year	Societies formed	Societies in activity
1878	57	830
1879	45	864
1880	81	902
1881	65	944
1882	59	891
1883	35	1006
1884	25	997
1885	26	988
1886	24	964
1887	16	907
1888	22	856
1889	26	836
1890	6	826
1891	13	822
1892	13	782
1893	15	764
1894	12	750
1895	3	729
1896	23	720
1897	10	704
	576	

Up to 1897 there had been formed 1558 (982 plus 567) associations, or which however only 704 continued in operation. The financial position

of the existing societies moreover was not very flourishing, and the number of members was relatively small. Thus, for instance 380 loan and deposit societies had only 141,073 members, or 374 members per society.

Their working capital is shown by the following table :

	Thousands of roubles	Percentage of total liabilities	Per member
	—	—	—
Members' contributions	3858.8	43	28.5
Reserve and other funds	841.3	9	5
Net profits	423.6	5	3
Own capital	5123.7	57	—
Deposits	1905.0	21	13.2
Bonds	2026.4	22	14.3
Capital of third parties	3931.4	43	—
	2055.1	100	64

The aggregate of loans granted amounts to 8,083,575 roubles ; the average of loans per member was 61 roubles.

Among the causes which contributed to placing the deposit and loan society in this sorry position, there must also be mentioned the following : the bulk of the peasants, considered as a whole, were not yet ripe for such an institution. The fundamental principles of cooperation, solidarity, the liability of " one for all and all for one ", undoubtedly presupposed a certain maturity of mind. Not indeed that it is to necessary to have attended the University in order to understand these conceptions, but when the peasant lacks the most elementary education, when he cannot even read the bye-laws of the association or affix his signature to the documents needed for his business, replacing it by his mark in the shape of a cross, then the absence of education produces grave effects. To this must be added the poverty of the peasant, who frequently, as we have said, finds it difficult, often impossible to pay his own contributions to the society. They became members in the hope of being able to receive a sum from the fund, and instead found themselves compelled to pay out their money, because without the payment of the member's contributions they were not admitted to the benefits of the cooperation.

With the object therefore of securing the loan, recourse was frequently had to the following well known means : the members' contribution was not actually paid, but was deducted from the first loan granted to the member. Thus for instance, if the contribution was 50 roubles, the member was granted a loan of 100 roubles, from which sum there was deducted 50 roubles for the contribution and 10 roubles for interest at 10 % on 100 roubles ; the member thus actually received 40 roubles but remained a debtor for 100. As afterwards he found difficulty in paying this sum he had recourse constantly to carrying over and renewal of the debt until it was finally classified among those not recoverable. Another evil was the so-

called *transcription of the debt* in the narrowest sense of the word, that is, on the advent of the date of maturity of the debt payment was not effected, but the title of the debt was copied out afresh, creating a new one. This operation was even renewed ten times and more; it is indeed alleged that these fictitious operations are the only active operations transacted by several associations. To justify this actual fact to some extent it may be mentioned that the duration ot the loan (9 months) was not in relation with the re-creation of capital in the agricultural industry, as no account was taken of the fact that the organic process in agriculture is related to the annual period.

Finally, it must be mentioned that the management of the societies entirely lacked expert staff, a class higher in culture not having yet formed among the peasants, and the members of the State administration having endeavoured to keep aloof from the societies the parish priests and schoolmasters, the only ones who might have afforded them assistance.

As regards the working capital, it should be mentioned that the capital belonging to third parties was not sufficiently ample to give any relief to the members of the association.

We have already seen that the basis of cooperative associations, *i. e.* the joint liability which should offer the creditors of the associations security for their claims, could not operate perfectly, because the greater portion of the property of the peasant was not subject to distraint for the debts contracted by him.

The final result of what has been stated is that the loan and deposit societies which had aroused so many hopes and promised so many benefits, after 10 or 12 years of development began to fall into decay, and continued in this retrogression until 1897, in which year a new era begins for the cooperative movement.

§ 3. The laws of cooperation of the 1st June 1895 and the 7th June 1905.

Nothing is so characteristic, in this new phase ot the cooperative movement, as the energetic action of the Government in its behalt. In the past the Government, if not entirely indifferent to the matter of popular loan facilities, particularly if intended to benefit the peasant class, had nevertheless never given them its own support according to a definite programme; it had never carried its action to the point of a system. The unhappy course taken by the loan societes, however, and the intense demand for loan facilities in rural districts, compelled it to seek for a solution of the problem. All endeavours made until then in the department of popular loan facilities had not any good result. Neither the Zemstvo, nor the Petrograd section of the Moscow Committee, nor yet private initiative, in spite of the good will which was brought to bear, had succeeded in giving the village good and cheap loan facilities. The Government now made the problem its own. As early as 1893, when carrying out the revision ot the ar-

ticles of the Imperial Bank, the Commission presided over by the Minister of Finance, S. Y. Witte, paid a visit to the Petrograd section. The Commission likewise decided to deal with popular loan facilities. With the Revision of the Imperial Bank, indeed, it had from the outset been thought to create a condition of things such as might exercise its beneficent influence likewise in favour of the peasants, the workman and the small trader, who form the fundamental components of the Russian economic system (1).

The Commission, into which there were likewise called the representatives of the Petrograd Section, summarised the results of their own work in the « Law on popular loan institutions », which received sovereign sanction on the 1st June 1895.

This law provides for the creation, side by side with the deposit and loan societies of a new kind of society, distinguished from the previous ones by the fact of its needing members' contributions for the formation of its own capital. These are the so-called " Credit " cooperative societies (retaining here the word *credit*, as used in the original name, in the sense of loan facilities, in order to distinguish them from those dealt whith hitherto), of which we shall have to speak later.

The " Deposit and loan associations " were modified according to the new standard by laws of 1896 as follows :

The right of membership was granted not only to individuals but also to associations, rural societies, agrarian associations and so forth. Each individual might become a member of a single association and possess a single share in it without the right of transfer. The loans could be granted not only against personal security or without security, but also by mortgage on rural property or pledge of agricultural produce, and power was also given to the societies to purchase for account of the members articles needed by them, and to sell their produce also for their account. Finally, the societies were placed under the superyision and direction of the Ministry of Finance.

The result of these measures was that the loan and deposit societies began slowly to display greater activity.

Thus from 1898 to 1901 there were the following new foundations of Societies ; 1898 — 28, 1899 — 48, 1900 — 67, 1901 — 90.

This last was the year of greatest development ; in subsequent years the movement again slowed down and thus there were in

1901 — 83	new	cooperative	societies
1903 — 68	»	»	»
1904 — 40	»	»	»
1905 — 11	»	»	»

In consequence of this symptomatic retrogression the bye-laws of the Deposits and loans Societies were revised. In the " Extraordinary

(1) Report of the Minister of Finance to the Commission, quoted in " Cooperative agrarian loan associations in Russia ", page 39.

Report on the needs of the agrarian industry" approved by the Emperor, the Societies among other things are spoken of very unfavourably. Thus it is stated that in Bessarabia and the province of Vologda, to take an example, they did not in the least satisfy the need for credit; that in the province of Tula only the rich peasants obtained loans, and so forth.

Consequently the law of the 7th June 1905 came about, and became operative in December of the same year.

According to the new Bye-laws prescribed by the law, the Societies were granted the right of obtaining loans from Government advances institutions in order to form their initial capital, particularly from the "Direction for the Popular Loans Institutions" founded in 1904, as a section of the Imperial Bank to encourage the popular loans institutions (ccooperative or otherwise). The Imperial Bank once again allowed its loans to the societies at short date to increase their working capital. This arrangement tended to relieve the Societies of the members' contributions, which were too burdensome for the peasants. For this purpose the contributions were likewise made smaller, fluctuating from 10 to 100 roubles, and the amount was fixed by the Societies themselves. The payment of the contribution could be in one operation or by instalments.

The credit opened or loan granted to a member was not to be in the ratio of his assets in the Society, but exclusively in relation with his general economic position and the confidence, he enjoyed. The maximum limit of the loan was fixed at 300 roubles; and its period was made dependent on the purpose for which it was granted. Thus, a loan granted for current needs might be for one year; that for obtaining cattle might last three years; and finally, a loan for the purpose of making a fundamental alteration in the agricultural undertaking might cover 5 years.

The dividends and the percentages of profits on each share were limited to 10 per 100 to be paid at the end of each financial year to the member who had already fully paid up his own contribution.

All these provisions brought about a renewed increase in the number of societies even more rapid than had ever taken place since their foundation, as appears clearly from the following table:

Year		Existing societies	
	1906	979	
	1907	990	
1st January	1910	1786	
»	1911	2134	
»	1912	2593	
»	1913	3052	
»	1914	3479	(1)
23rd »	1915	3759	(2)
1st »	1916	4078	(3)

(1) "*Recueil de données statistiques et économiques sur l'industrie agricole en Russie et dans les pays étrangers*", page 548. Petrograd, 1915.

(2) *Messager du petit crédit*. January 1915, No. 3-4.

(3) *Messager du petit crédit*. January 1916, No. 2.

The table shows that in the last 10 years the number of Societies has increased more than fourfold. We must add that not only has the number increased, but their solidity, activity and economic potentialities have grown.

Such has been the varied fortune of the deposit and loan fund Societies from their foundation to our time. We must now speak of their younger sisters, the " Credit " Societies.

§ 4. The cooperative loan societies known as " credit " societies.

While the earlier loan and deposit associations owed thir creation to private initiative, the later loan (" Credit ") associations are, on the contrary, entirely a creation of the Government. They were founded in 1895, when the first law of cooperative societies was enacted, and their bye-laws, similarly to those of the loan and deposit funds, were subjected to a revision, the results of which have now been incorporated in a law.

Their principal characteristic is that the members' contributions are not needed to form the capital of the society ; no payment is required from the members when they join the society.

The capital of the society, which may not be less than 1,000 roubles, may be provided, either by the Imperial Bank (but not by the Direction of Popular Loan Institutions, as was the case with the deposit and loan societies) or by the Zemstvos, or again by the founders of the society themselves.

In this respect the associations represent an improvement as compared with the earlier ones, because the contributions of members, at least in the earlier days, formed a burden to many members, and at the same time arrested the development of the society. With the exception of this point, there is no great difference between the two types of institution.

In addition to the reserve fund, made up of the profits, these loans (" credit ") associations, also have special funds for the purpose of operations as middle-men, for instance the sale and purchase of agricultural produce for account of the members, to assist the members in case of misfortune, etc. The joint liability is limited, and in this point they differ materially from the Raffeisen societies, while from all other points of view they are very similar to the latter. For the rest, the liability is limited to twice the amount of the credit opened to members ; the society may, however, at the moment of its foundation, likewise adopt unlimited liability.

Its principal act of operation is of course the granting of loans, which is only done for productive purposes (as is likewise the the case in the the deposit and loan society). When the purpose of the loan is not stated, it can only be of very short date, and may not exceed one tenth of the sums usually granted by the society.

The rate of interest is not fixed by the bye-laws, but depends exclusively on the amount, the purpose and the period of the loan.

The State administrative bodies, such for instance as the Volost and the Police, may, on the expiry of seven days from the lodgment of infor-

mation by the management of the society, arrest the defaulting debtor in order to compel payment of his debts.

The first of these cooperative societies was founded in 1897; since that year the number of these institutions has increased with extraordinary rapidity, as may easily be seen from the following table:

Years		Existing societies	
1897-	1901	121	
	1902	230	
	1903	381	
	1904	648	
	1905	965	
	1906	1497	
	1907	2314	
17 July	1908	2667	(1)
	1910	3606	
	1911	4545	
	1912	5940	
	1913	7967	
	1914	9536	(2)
23 January	1915	10622	(3)
1 January	1916	11372	(4)

This triumphal progress of the "Credit" Societies must in the first place be attributed to their organisation, which was excellent and suited to the environment; to the constant anxious concern of the Government and to the lengthy previous experience. The "Credit" Societies have prospered owing to the work of the Deposit and Loan Societies which paved the way for them, and also because the idea of cooperation was now a little better understood, and the general level of culture in the villages slightly higher. The effects of cooperation in the economic and social life of the country were more justly appreciated; its value was recognised above all as an economic factor, without demanding from it political effects, as had happened in the earlier times.

§ 5. The Zemstvo Funds.

As to this institution we shall say but few words, as we hope soon to be able to inform the reader about the general function performed by the Zemstvos in Russian agriculture. The Zemstvo Funds were created in 1904 on the occasion of the promulgation of the second law on cooperative societies for small loans and advances.

(1) *Il credito agrario in Russia*, page 156.
(2) *Recueil de données statistiques et économiques*, page 554.
(3) *Messager du petit crédit*, January, 1915, N° 3-4, N° 42, 1915.
(4) *Messager du petit crédit*, January 1916, N° 2.

In this way it was sought to enable the Zemstvos to take an interest once more in agricultural loan facilities as they had done about the year 70 in the previous century.

The function of these funds is two-fold : in the first place, to get into touch with the individual farmers, workmen, etc. ; in the second place, to subsidise other associations, such as cooperative, agrarian societies, communal peasant associations, and so on. In this latter respect they also among other things fulfil the functions of the so-called Loan bank Federations still so undeveloped in Russia.

Their development is shown by the following table :

Year	Number of Zemstvo Funds	Assets and Liabilities — Roubles
1907	19	
1909	36	
1912	104	16.956.500
1913	148	44.974.900
1914	196	65.985.900 (1)
8 October 1915	240 (2)	

(To be continued).

(1) *Recueil de données statistiques et économiques*, page 467.
(2) *Messager du petit crédit*, 1915, N° 42.

MISCELLANEOUS INFORMATION RELATING TO COOPERATION AND ASSOCIATION IN VARIOUS COUNTRIES.

ARGENTINA.

THE FORMATION OF THE "WINE-GROWERS' CENTRE" AT MENDOZA. — Anales de la Sociedad Rural Argentina, Buenos-Aires, November-December 1915.

The province of Mendoza, as is well known, is the most important province in the vine-growing region. According to the data published by the General Direction of Statistics, the area under vines in that province at the end of 1915 was 70,997 hectares, of which 56,321 were in full bearing, 9,747 will begin to produce for the next crop, and 4,929 will not be productive until 1917. It is estimated that the next crop of grapes will be 14,892,500 quintals.

These figures demonstrate the importance to be attached to the recent formation in Mendoza of an association which proposes to represent, defend and promote the vine-growing interests of the locality, and which has adopted the name of "Vine-growers' centre".

It will therefore be of interest to our readers to learn the objects aimed at by the new association. They are as follows, according to its articles :

(*a*) To direct and regulate the vine-growing and wine-making operations ;

(*b*) To unify the action of the group with a view to obtaining always a remunerative yield from the culture of the vine, in order to maintain the value of landed property ;

(*c*) To represent the vine growers for the defence of their interests, even before the courts ;

(*d*) To promote the formation of establishments and associations which shall cooperate in industrial development and regulate supply ;

(*e*) To watch over the proper treatment of the grape in order to ensure the excellence of the product, by prosecuting all defective or fraudulent forms of manufacture in and out of the province ;

(*f*) To strengthen community of interests among the members and encourage them to make use of loan facilities and insurance so as to avoid irreparable losses by reason of fires or forced sales ;

(*g*) To collaborate with the action of the public authorities with a view to furtherance of the spirit of association and the development and progress of the industry ;

(*h*) To take such measures as are expedient for restoring the economic position of the province, by means of a rational turning to account of the vineyards and their products ;

(*i*) To stimulate professional cooperation in all operations connected with the vine-growing and wine-making industry ;

(*j*) To endeavour to improve means of transport.

While exercising, as stated above, the ample powers vested in it to represent the association towards the public authorities or private individuals, the Board of Directors of the Centre will be authorised to fix the price of grapes, preventing in this way the undercutting which is the outcome of competing interests.

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FORMATION OF THE NATIONAL SOCIETY OF PRODUCERS. — Anales de la Sociedad Rural Argentina. Year No. 6, Buenos-Aires, November-December, 1915.

On the initiative of the Ministry of Agriculture there was recently formed in Buenos-Aires a cooperative society of Argentine producers of commodities for general consumption such as fruits, vegetables and other products of the soil and rural industry.

The essential object of this new association lies in encouraging the production and the commercial dissemination at home and abroad of national produce likely to gain a hold of the market by reason of its quantity, quality and price, the increase of the number of farms and small holdings, and the organisation on an extensive footing of institutions of this kind already existing in the country or founded hereafter.

The National Society of Producers will, by every means in its power, facilitate direct trade between producers and consumers, its acts being always subject to the supervision and checking of the Ministry of Agriculture. The society may engage in the following operations :

(1) Receive in deposit and sell retail and to the highest bidder in markets and on the premises at its disposal, the products and articles coming direct from the producers.

(2) To furnish the necessary rooms, on the premises at its disposal, for direct sale by the producers or their representative.

(3) To convey and deliver to the consignee's premises consignments made by producers direct to consumers or retail vendors, and also the goods dealt with by the society in the same way.

(4) To undertake the purchase of the seeds and agricultural implements which may be needed by the producers.

(5) To establish insurance of goods in transit and the use of preservative means for the produce.

(6) To encourage the exchange of products between the different zones or regions of the country by means of advertisements and representatives in the different localities.

(7) To grant credit or advances to its members for a sum proportional to the amount of the shares subscribed by them or the payments made, as well as against delivery of ungathered fruit.

(8) To consider and deal with such applications as producers may address to it in relation to processes and matters connected with farming or rural industries.

All these operations will be conducted in conformity with the provisions contained in the by-laws and articles of the society.

The capital is fixed at 250,000 pesos national currency, comprising 5 series of 2,500 shares of 20 pesos each.

The net profits left by the operations of the society will be distributed as follows : 15 % to the Board of Directors and Auditors in proportion to their attendance allowances ; 15 % for bonuses and allowances to employees ; 45 % to the reserve fund until it equals the capital, and 25 % to the members.

The Ministry of Agriculture has offered its cooperation to this new association, and has placed at its disposal the premises and installations it possesses for the sale of the produce.

FRANCE.

THE SOUTH EASTERN UNION MECHANICAL CULTIVATION ASSOCIATION. — From the Bulletin de l'Union du Sud-Est des Syndicats agricoles, March 1916.

The South Eastern Union Mechanical Cultivation Association, after a thorough comparative examination of the different systems of tractors or motor-cultivators at present offered by manufacturers, has just bought an American Emerson tractor, built in the works of the Emerson Brantingham Implement Co. in Illinois.

This implement can, in soil of average (and even great) tenacity draw a three-share plough working to a depth of 18 or 20 centimetres by 90 to 95 centimetres width. It will in this way plough 30 ares per hour. It in point of fact performs the work of at least 8 pairs of oxen with a single man and an assistant.

The South Eastern Mechanical Cultivation Association offers its effective help to farmers of the regions on the following conditions :

(1) Long distance travelling being difficult and expensive, it will only be undertaken when one or more farmers or farmer's associations guarantee an area to be worked of 5 hectares at least in one and the same region. If exceptions are made to this rule in order to allow of demonstration, special terms of price will have to be settled.

(2) The dimensions of the implements and the space it requires to turn in (10 metres) forbid the undertaking of work except on lands with furrows of 120 metres length at least: and to which access is obtained by roads or bridges with not less than 2 ½ metres width of track. Nevertheless.

where it is only a question of a few shorter runs to finish off a piece of land, they will be carried out as far as is feasible.

(3) The inclusive contract price for ploughing work to a depth of 18 to 20 centimetres in soil of average cohesion and on a moderate slope, is for the present fixed at 50 francs per hectare, including petrol, oil and working staff, the farmer being only called upon to furnish food and lodging for the driver ad his assistants and the small work of transport, which may be called for to keep the engine provided with petrol, oil etc. The expense in this case is not heavier than that of animal-drawn ploughs. Like the latter, it is at the present moment heavily surcharged owing to the war, the cost of petrol having doubled. If the latter fell, the cost would be reduced.

In the case of lands specially difficult to work owing to their tenacity or any other cause, an additional charge may be made. Lands with excessive slope must be excluded. The price for subsequent dressing processes, such as harrowing, use of the cultivator and sowing, will be fixed subsequently on the basis of experience. The price for deep ploughings and subsoil ploughing and trenching will be settled by mutual agreement after examining the nature of the soil and subsoil.

NOTICES OF SOME RECENT PUBLICATIONS CONCERNING CO-OPERATION AND ASSOCIATION.

SPAIN.

SOLUTION OF THE PROBLEM OF FIELD LABOURERS THROUGH THE AGENCY OF THE CATHOLIC AGRICULTURAL UNIONS. — *Archivo Social*, A monthly publication issued by the " Accion Social Popular ", year VI, No. 115. Barcelona, January 1916.

At the outset of this work the precarious position of labourers in the fields in Spain is placed before the reader. While on the one hand there is the hardship and roughness of toil in the fields, exposed to all the inclemencies of the weather, there is on the other the low level of wages paid to the labourers. The wage, taking an average of different seasons and localities, is 2 pesetas per day ; yet as labourers generally only find employment for three-fourths of the year, the average wage earned by them during the year is 1 ½ pesetas per day, with which it is almost impossible for them to supply the most imperative needs of their homes.

This is one ot the factors exerting the most direct influence on the growth of the exodus from the country to the cities, and emigration to other countries. Such a position, furthermore, embitters the struggle between labour and capital.

To remedy these evils it is stated in the work under review that it would be necessary and desirable for the Catholic Agrarian Organisation to be able to direct the movement of association so as to bring about the formation of mixed agricultural unions, consisting, that is, ef employer members and labourers, in which unions the last named could forthwith find positive advantages to improve their position, present and future. Thus these bodies, when formed, include among their objects the following:

1. To provide for each agricultural labourer proper who is a member of the syndicate, an allotment of land proportional to the circumstances and conditions of each locality, and which may, at little expense, be cultivated by him, with the assistance of the members of his family when he is at work, with a view to obtaining produce such as wheat, barley, vegetables, potatoes etc. required for his home, and pasturage if he has any cattle.

2. To facilitate the acquisition by labourer members of the ownership of some holding the purchase price of which will be advanced by the union,

by means of a loan of the rural loan bank in favour of the purchasing member, secured by mortgage on the property, for a suitable period, in order that the interest, which must be as low as possible, and the instalments of repayment, shall not entirely absorb the net proceeds which the property in question is calculated to yield. On a similar method, the purchase of cattle by the labourer member can also be facilitated.

3. To establish, through the agency of the union, compulsory collective insurance against old age in favour of its labourer members, by arrangement with the National Provident Institute.

Part II: Insurance and Thrift

RUSSIA.

FOREST INSURANCE IN FINLAND.

(By Baron E. F. Wrede).

OFFICIAL SOURCES:

Finlands Officiella Statistik. XVII. (*Forststatistik år* 1912. (*Official Statistics for Finland. XVII. Forest Statistics, year* 1912). Helsingfors, 1915.

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Endres Max: Handbuch der Forstpolitlk (*Manual of Forestry Policy*). Berlin, 1905.

Hannikainen, P. W.: The State Forests. In the "*Atlas of Finland*", Helsingfors, 1911.

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Renvall Heiki: Suomen metsäntuotteiden vienti (*The Exploitation of Forest Products in Finland*). Helsingfors, 1910.

"Sampo". Försäkringstidskrift utgifven af Ömsesidiga Försäkringsanstalten Sampo ("*Sampo*". *Insurance Review, published by the Sampo Mutual Insurance Society*). Years 1914 and 1915.

Ömsesidiga Försäkringsanstalten Sampo. Bestämmelser för Ömsesidga Försäkringsanstalten Sampos avdelning för Skogsbrandförsäkran (*Sampo Mutual Insurance Articles for the Forest Department of Sampo*). Abo, 1914.

Ömsesidiga Försäkringsanstalten Sampo Avdelning för Skogsbrandförsäkring. Premietariff och Agentinstuktion (*Sampo Mutual Insurance Society. Department of Forest Insurance. Tariff of Premiums and Instructions to Agents*). Abo 1915.

Ömsesidiga Försäkringsanstalten Sampo. Anstaltens verksamhet 1914 (*The Sampo Mutual Insurance Society. Its activity in* 1914). Abo, 1915.

The organisation of forest insurance has for some years been an important question in the Northern countries, where the vast forests play a predominating part in the national economy. In Norway there was created n 1911, for this branch of insurance, a special undertaking, which was the subject of an article in these pages in September 1913 ; in Sweden a similar society was formed in 1915 ; in Finland the " Sampo " Mutual Insurance Society introduced this insurance in 1914.

Below we endeavour to give some information as to the organisation of the department of Forest Insurance of the " Sampo " and the first results of its operations.

In order to bring home more effectively the importance of this Finnish initiative, we wish in the first place to reproduce some statistical data as to the extent and value of forests in Finland and set out briefly what has been done by public authorities and private persons with the object of preventing the outbreak of fires in the woods.

§ 1. Area and value of forests in Finland.

In no European country are the forests so large an area relatively as in Finland. According to Mr. Max Endres (Handbuch des Forstpolitik, Berlin, 1905, page 6) 20,215,000 hectares, or 63 % of the total superficial area of the country is covered with forest, while in Bosnia and Sweden the two countries coming next in order, the corresponding percentages are only 50 and 47,6

According to the statistics of Finland the total area of the country is estimated at 37,360,400 hectares, of which 4,167,000 are covered by lakes. The extent of waters and State forests was, in 1913, 12,616,566 hectares divided approximately as follows : fields 12,218 hectares ; grass lands and cleared lands 59,356 hectares ; dry forest soil 5,361,547 hectares marshes, peat beds, rocks, etc. more or less wooded 6,705,894 hectares ; water 477,541 hectares.

The number of sawn logs, that is to say those having at least a diameter of thirty centimetres by a length of 1 m. 30, amounted to 92,113,575 at the 1st January 1914, and the number of logs of smaller size (having only 25 to 30 centimetres diameter with the same length), to 62,974, 763. The State Forest receipts amounted in 1912 to 14,128,774 francs and the expenses to 5,361,732 francs. Besides these forests, the State further possesses a large number of real properties, consisting for the most part of farms which formerly were the residences of the officers and non-commissioned officers of the Finnish army. These properties cover 163,342 hectares of good quality forest soil and 37,993 hectares of wooded marshy soil.

As to private forests no such precise particulars are available. In a report of 1899 — there is no estimate of later date in existence — the " Committee of Private Forests " estimates them at 11,513,030 hectares, of which 1,800,901 hectares wooded marshy land. These forests belong, some to

the clergy, some to communes, and others again to private persons. Their management is generally less satisfactory than that of State furests; unfortunately there are no data as to the number of wood logs obtained from them.

The church farms, which form the residence and in part the income of the Lutheran clergy, comprise fairly spacious forest: 188,154 hectares of good quality forest soil and 56,861 hectares of marshy soil, peat beds, etc.

Town communes own nearly 40,000 hectares of forest; rural communes on the contrary possess but little. For some time past however the matter of extending communally-owned forests has been taken in hand.

Companies engaged in the wood industry at present are the proprietors of vast forests. According to the calculations of the " Committee for Land settlement ", these companies, in 1901, owned 572,739 hectares, the major portion of which is made up of forests and wooded lands. We may add that since then the forest properties of these companies has largely grown.

Notwithstanding this, the greater portion of private forests belong to private individuals.

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The Finnish forests have always been of very great importance to the general economy of the country. To this very day buildings are generally constructed of wood, even in the majority of towns. Wood is also used almost exclusively as fuel for heating private houses, factories and industrial establishments, and on railways and steamboats.

Finally it is employed for the construction of instruments of every description. Various proprietors consequently derive the greater portion of their revenues from forest exploitation, agriculture proper furnishing but a very low yield. Indeed except along the coast, the greater portion of Finland, with its rigorous climate and unfertile soil, is more adapted to forest exploitation than to cultivation.

It has been attempted to estimate the domestic use of wood in the country. According to a recent calculation made by Mr. I. Lassila, this consumption reaches the considerable figure of 25 ½ million cubic metres per year, exclusive of city consumption.

From the middle of the last century, above all after 1870, the exportation of forest products of every description was begun, and at the present time these products constitute the principal article of export of the country. In 1913, indeed, the value of timber and worked wood exported amounted to 227,339,000 francs, being 56,58 % of the total exports. The value of the cellulose, paper and cardboard exported in the same year reached 71,273,000 francs, being 17,74 % of the total figure of exports.

We may add that according the official statistics the number of saw mills and clog factories was, in 1912, 595. They engaged 25,660 workmen and their output totalled 130,193,200 francs.

The saw mills turned out 36,026,400 logs, of a total value of 90,597,600 francs; 45 wood pulp factories employed 3,172 workmen and produced

19,546,900 francs worth of wood pulp ; to these must be added 17 cellulose factories with 2,465 workmen and 22,177,000 francs value of output ; 26 paper mills with 4,679 workmen and an output representing 50,828,300 frs. 20 tar factories and wood distilleries, of less importance, converting 220,110 francs worth of raw material into 508,000 francs of products.

§ 2. Preventive measures against forest fires.

The above figures show clearly that forests play an absolutely predominating part in the general economy of Finland.

Nevertheless a certain danger always threatens private forests, owing to the fact that each owner is entitled to work according to his own fancy almost. Moreover it has frequently happened that small landed proprietors have sold vast forests at a very low price to companies which have started a perfectly ruthless exploitation. These facts have attracted attention, and have given rise to several parliament bills aiming at restricting the liberty of forest working ; unfortunately none of these bills has gone through hitherto.

With regard to the risk of fire, Professor Cajender thinks it so frequent that, according to him, there are few forest territories in Finland which have been spared by fire. (1) He points out by way of example that in 1868, 1883, and 1894 64,501, 54,223, and 67,563 hectares of forest estates were ravaged by fire. In 1912 the fires in these forests reached the number of 127, ravaging 2,448 hectares and causing 67,893 francs worth of damage.

One of the principal causes of the frequency of fires is the practice of peat burning formerly carried on throughout the country, and continued even in our time, though on a rather small scale, in the provinces of Karelia and Savolax (in the eastern part of the country). Therefore the forest law of 1886 forbade this practice in pine forests, and hardly allows it at all except on peat beds, marshy lands, etc. It is also prohibited to light fires in the forests without the consent of the forest owner, and this consent even is not valid in times of drought or high wind.

Besides these preventive measures, the law further enacts that in case of fire, neighbours are compelled to afford aid, and if the fire assumes considerable proportions, the administrative authorities and the officers of the public forest department are entitled to requisition the assistance of one man in each house of the canton where the fire has broken out. The law also authorises cantonal authorities to appoint a permanent chief for this possible work of rescue, when it arises.

The forest company " Tapio " on its part is carrying on propaganda with a view to inducing the cantons to publish regulations with the object of preventing or extinguishing forest fires. All these measures however require to be supplemented by insurance.

(1) Cajander, A. K. : Forêts et économie forestière en général. In the " Atlas de Finlande 1910 ", Helsingfors 1911, Page 4.

In 1911 the Central Federation of the Agricultural Societies of Finland discussed the possibility of introducing this insurance in the country; later on the Association of Saw Mill Owners took up the question; finally the "Sampo" Mutual Insurance Society undertook to cover this risk from the 15th June 1914.

§ 3. Organisation of the forest insurance department in the "Sampo" society.

The "Sampo" has, for the most part, in organising its department of forest insurance modelled itself upon German example. This company accepts insurance of :

1) young forest stands and trees of small size not exceeding 5 metres in height and m. 0.125 in diameter ;

2) forest stands which have reached a workable age ;

3) the felled wood still lying on the site where felled (timber, poles, wood fuel, etc.).

The insurance may likewise, for stands below the age of fifteen years, include the costs of organisation of the plants intended to replace those destroyed by fire.

In Norway, where forest insurance has been practised since 1911, it extends to root stocks and surface cover. In Finland there has been, up to now, some hesitancy as to making this extension, owing to the well known difficulties of assessing the damage. On the other hand, while the Norwegian company does not insure trees which have reached a workable age, the "Sampo" as we have seen, does carry on this insurance.

As a general rule the insured must include in his contract the whole of the forest domain of any property. Nevertheless certain exceptions, amounting to up to 50 % of the total area, may be made with the consent of the Board of the Company.

The Company in case of fire only makes good three fourths of the loss, whatever the amount of the risk covered, and the insured is prohibited from entering into a new contract to cover the balance of the risk. It is thought in this way to induce the owners of forests to take all necessary measures to prevent the outbreak of fire, or at any rate to hinder its spread.

The Company makes good all damage due to a fire, either directly or indirectly, as a result of the steps taken with a view to extinction of the fire. The root stocks and soil cover are not included in the insurance, and the expenses incurred by the insured in extinguishing the fire are not refunded. Excluded likewise are risks of war or riot, and earthquake. The disturbance of organisation is also not included.

As the risks vary greatly from year to year, the contracts cannot be made for less than five years, except the accessory contracts relating to the felled crops left lying on their site (timber, poles, wood fuel, etc.).

All proposals of insurance must be made in writing on a special form.

The insured is bound to answer all the questions put to him by the Company. He must in particular declare :

1) Whether he is the owner of the forest he wishes to insure ; if this is not so, he must state the name of the owner and the time for which he is in possession ;

(2) whether the enjoyment of his right of ownership is subject to any limitation ;

(3) whether there are, within a distance of 50 metres from the forest, industrial establishments, forges, coal mines or other establishments calculated to increase the risk ;

(4) whether there is a railway within 100 metres from the forest ;

(5) whether the forest is already insured with another company.

The insured is bound to give notice in writing to the Company of any modification in the conditions of his forest working likely to increase or reduce its risk. The insurance premiums may be altered in accordance with the particulars thus notified.

In addition to an entrance fee amounting to 0. fr. 05 % of the crop stand capital insured, members pay annual premiums, the amount of which will be shown below, and, the case arising, extra premium calls, limited however to three times the normal annual premium.

The insured is bound to take all desirable measures against fire. In case of fire he must give notice immediately in writing to the company as to the nature of the damage and the approximate amount of the loss and within 30 days he must file a detailed claim for indemnification with precise particulars as to the area damaged, the amount of the loss, the cause of the fire, etc. This claim must bear the attestation of an agent of the society or two known persons. The company may cause oath, as in law, to be put to the assured in reference to the accuracy of the particulars furnished by him. Each of the two parties may likewise require the other to accept arbitration carried out by two special assessors, who may add a third to their number should they be unable to agree. Fires not occasioning a loss exceeding 50 fr. cannot form the subject of a claim. Furthermore, the insurance cannot result in the realisation of a profit by the insured, and therefore the company takes as the basis of its indemnity the reduction in value undergone by the forest after the fire. This reduction in value is arrived at as follows :

(1) for standing wood of a workable age, the value of the lost timber is estimated according to current prices. For these forests, the company has fixed the following average values per hectare ;

Age up to:	Southern parts of the country	Central parts of the country	Northern parts of the country
60 years	500 francs	350 francs	250 francs
80 »	700 »	550 »	400 »
100 »	850 »	700 »	500 »
120 »	1,000 »	850 »	600 »

(2) For young stands there is taken as the basis the future value, less discount at the rate of forest capitalisation, with a maximum of 200 francs per hectare.

(3) For the seedlings and plantations the assured is indemnified for his expenses of cultivation plus the normal revenue of the plantation reckoned at the rate of forest capitalisation and reduced by the amount of actual receipts if any. The costs of cultivation must not exceed 50 francs per hectare.

(4) For felled forest crops, there is taken as the basis the price of the wood lost, including the labour employed in felling.

The articles of the " Sampo " society also provide for cases of lapse and contain provisions guaranteeing the rights of mortgagees.

At present the annual premiums are fixed at the following rates per cent :

Locality of risk	Organised forests				Unorganised forests			
	Young stands	Seedlings to plantations of less than 15 years of age	Forests of workable age	Felled wood in situ	Young stands	Seedlings to plantations of less than 15 years of age	Forests of workable age	Felled wood in situ
Governments of Nyland, Abo and Björneborg, and Tavastehus	1.25	3.50	0.75	4.50	1.50	3.75	0.80	5.75
Governments of S. Michel, Kuopio Wasa and Uleaborg	1.50	3.75	1.00	4.75	1.75	4.00	1.10	5.50
Government of Viborg . .	1.75	4.00	1.00	5.00	2.00	4.25	1.10	5.75

There are considered as organised or managed forests those which are placed under the regular supervision of a qualified forester, or the owner of which is a member of a forestry association.

In those districts where the risk is greater, the society increases the ordinary premium to an extent which is usually 5 %, but at times amounts to 10 and even 15 %, and in three cases even to 20 %.

If, within 50 metres from the forest, there are industrial establishments, forges, collieries or places of storage of inflammable materials, an additional premium of 10 to 15 % is charged ; also the presence of a railway within one hundred metres gives rise to an extra premium of 15 to 25 %. Finally the premium is surcharged 30 % when the insurance only covers part of the risk.

§ 4. Survey of the first results of the operations of the "Sampo" society.

The first annual accounts of the societhy are of great interest, although it is premature to draw any conclusion therefrom.

From the 15th June 1914 to the end of the year, the amount of the risks insured by the company totalled 37,722,000 francs; the entrance fees amounted to 18,761 francs and the premiums to 40,447 francs. The claims, numbering 19, aggregated 14,380 francs.

The profit and loss account of the society at 1st January 1915 appears as follows:

Profits and losses (in francs).

Receipts		Expenditure	
Premiums and entrance fees	59,308.27	Claims paid	14,380.44
Interest on arrears	151.23	Commission	2,849.53
		Administrative expenses	7,814.09
		Profit	34,415.44
	59,549.50		59.459.50

It will be observed that the administrative expenses are relatively low. This is chiefly due to the fact that the forest insurance department has been able to benefit by the organisation of the other departments of the society. In accordance with the provisions of the articles, the amount of the entrance fees has been carried to the reserve fund, and 13,000 francs have been appropriated to redemption of installation costs.

The balance sheet at 1st. January 1915 is made out as follows:

Assets		Liabilities	
Capital	24,500 francs	Loans	3,084.56 francs
Installation	13,000 »	Profit balance of financial year 1914	34,415.44 »
	37,500 »		37,500

According to the particulars kindly placed at our disposal by the Board of the "Sampo", the second financial year of the company shows fresh progress. At the 1st September 1915, the risks insured covered 400,000 hectares, of a declared value of 66,400,000 francs and distributed over 1,100 contracts.

We may add that at present the "Sampo" is the only company carrying on forest insurance in Finland.

MISCELLANEOUS INFORMATION RELATING TO INSURANCE AND THRIFT IN VARIOUS COUNTRIES.

FRANCE.

AGRICULTURE AND FIRE INSURANCE IN WAR TIME. — According to *La vie agricole* of 8th January 1916.

The position in which the war has placed those insured against fire raises delicate problems. They have been met as follows, as the result of an arrangement between the president of the Committee of general Fire Insurance Interests and the president of the Association of French Industry and Agriculture.

It was agreed that the position of mobilised persons and insured persons, particularly those in the invaded regions, should be determined as follows :

Non-payment of Premiums. The non-payment of premiums shall in no case entail forfeiture of the rights of the assured during the entire period of hostilities.

Risks destroyed, disappeared or reduced by act of war. The following four cases contemplate only the assured in the invaded regions.

1st case. The premium is entirely refunded when it has been paid after the destruction or complete disappearance of the risks prior to its falling due.

2nd case. When the destruction or complete disappearance is subsequent to the payment of the premium, the company shall refund as many times one-twelfth of the premium as there were entire months remaining to run, at the time of destruction or disappearance, until the expiry of the period for which the premium had been paid.

3rd case. When the destruction or complete disappearance takes place after the due date but before the payment of the premium, the company shall only require the payment of as many times one-twelfth of the premium as correspond to the number of months elapsed between the maturity of the premium and the destruction or disappearance of the risk, any fraction of a month being reckoned as a complete month.

4th case. In the event of partial destruction or disappearance, whatever the value of the part destroyed or disappeared, the cancellation

or splitting up into fractions of the premium is calculated on the foregoing bases, in proportion to the reduction of the capital insured. This reduction is recorded by a memorandum stipulating that it is not a definitive reduction but a partial suspension. On the date of partial or complete restoration of the risk the assured is, on the other hand, bound to declare the extent of the restoration of the risk immediately to the company and to require from the latter the completion of his insurance.

For additional insurance against the risk of suspension of business, the companies follow the same rules as in the insurance of material risks.

The cases specified above, whether destruction or complete or partial disappearance is in question, never give rise to cancellation of the insurance but only to its total or partial suspension.

Idleness or suspension of operations owing to war. — When a risk is insured against stoppage of work, the special premium in respect thereof will be charged according to the rules laid down above for assessing the fire risk premium.

RUSSIA.

LIVESTOCK INSURANCE IN RUSSIA. — *Messager des Finances, de l'Industrie et du Commerce*, N° 48, 6th. December 1915.

The first livestock insurance society was formed in Russia in 1839 by private initiative. It was a mutual society, the capital of which was made up exclusively of the insurance premiums collected. It ceased to exist in 1858.

The "First Russian Livestock Insurance Society", founded in 1876, lasted only one year. Two other mutual insurance societies, founded in 1882, the "Russian Society" and the "Moscow Society", had a life of five and two years respectively.

Livestock insurance was undertaken by the Zemstvos about 1880 but without any great results, by reason either of the financial difficulties or, mainly, in consequence of obstacles of a technical nature inherent to the organisation. In 1912 there was founded the "First Russian Mutual Livestock Insurance Society". with a capital of 500,000 roubles. Its programme, as set out in its articles, is a very extensive one: the insurance of livestock against death, application of a differential tariff, formation of a special "veterinary" capital, intended for sanitary inspection, etc. This society opened agencies almost throughout European Russia.

The following data are available as to the operations which it effected: from the 1st June 1912 to the 1st March 1915 (that is, in the course of nearly three years) it insured 46,798 head of big cattle and 83,329 horses

for a value of roubles 14,078,922. The premiums received during that same period amounted to 646,022 roubles, and the claims paid to cattle owners to 48,000 roubles.

The society, widening its operations, has entered upon an examination of the statistical data collected and the preparation of a new tariff based on experience. The society is likewise studying the question of the insurance of herds as a whole and the insurance of cattle destined for the butcher. Recently it likewise endeavoured to directthe attention of cooperative associations to the problem of insurance in order to obtain their collaboration.

Part III: Credit

AUSTRIA.

PROVINCIAL INSTITUTIONS FOR MORTGAGE ADVANCES AT THE 31st DECEMBER 1913.

SOURCES:

COMPASS, Finanzielles Jahrbuch für Oeserreich-Ungarn 1915 (Financial Year Book for Austria-Hungary 1915), Vienna, Ed. Compass, 1915.

BRAF (Dr. Albin): Der landwirtschaftliche Hypothekarkredit in Oesterreich während der letzten fünfzig Jahre (Agricultural financial facilities against mortgage security in Austria during the past fifty years) Vienna, Moritz Perles, 1899.

HATTIMBERG (Ritter von Josef): Referat betreffend die Frage der Hypothekarentschuldung (Report on the problem of relief of the mortgage debt), Vienna, W. Frick, 1903.

MULLY VON OPPENRIED (Prof. Robert): Die Hypothekaranstalten in Deutschland und Oesterreich-Ungarn (Mortgage loan institutions in Germany and Austria-Hungary), Vienna, Hölder, 1911.

§ 1. ORGANISATION.

The provincial Institutions which provide facilities for advances against mortgage security have been founded by the administrations of the provinces, and may be subdivided into two categories: " provincial hypothecary (1) Institutes " (Landeshypothekenanstalten) and " provincial hypothecary Banks " (Landesbanken).

The two categories have the feature in common that they are public institutions, and do not attempt to realise any gain or carry out any speculation. Both the Institutes and the Banks are intended to meet the demands

(1) The reader will no doubt have in mind the distinction between « mortgage » and « hypothecation »: by the former, title and possession pass out of the owner's hands, by the latter they do not, with resulting difference in legal position.

for financial facilities on the security of property, both in town and country. While however the majority of the provincial hypothecary Institutes engage exclusively in making advances on the security of property, preferably rural property, some provincial hypothecary Banks have a much wider sphere of activity, and while carrying on operations of town and rural hypothecary advances, grant loans to provinces and communes, to railway companies, loans for purposes of improvements, loans against pledges deposited etc. It should however be noted that some provincial hypothecary Institutes grant loans to communes (for instance that of Lower Austria) and that there is one Bank which only grants rural and town loans on the security of property (hypothecary Bank of Vorarlberg). The character of these institutions as establishments of public utility, which entails the exclusion of all speculative business, is enforced in the provisions of their bye-laws. For this reason the same rate of interest is fixed for the land bonds and the corresponding loans. The expenses of management are covered by the payment of a very low percentage on the principal outstanding; sometimes nothing is required in this respect from the borrowers when the reserve fund has reached a certain amount, or else the percentage payable is limited, in the case of small landowners; the establishment itself effects registration of the loan in the land register against mere repayment of its out-of-pocket expenses, if the borrower is poor etc.

Among these institutions, one remarkable for its peculiar organisation is the "Land Loan Society of Galicia" (Galizischer Boden-Kredit-Verein), constituted in the form of a cooperative society on the model of the Landschaften, and made up of big landed proprietors. It only lends to its members by issuing 4 % land bonds redeemable by instalments in 41 or 56 years. In addition there is a compulsory payment of ¼ to 1 % for costs of management. The land bonds are secured not only by the hypothecated property but also by the reserve funds of the establishment and, subordinately, by the borrowers. In addition to the amount of the loan, there is entered in the land register a sum equal to 5 % of that amount as collateral security. The members of the society are jointly and severally liable to third parties. The "Galician land Loan Society" was founded on the initiative of the provincial representative of Galicia, and must be regarded as a provincial institution.

The provincial hypothecary advance institutes are governed by a board of directors (curatorium), by the management and a body of special employees under the supervision of the provincial commissions, and the high surveillance of the provincial Diet. The Board of Directors and the Manager are generally appointed by the provincial Diet. The powers of the Manager are not very extensive; on the other hand, the directing Boad deals with and resolves upon all business of any importance. The supervision exercised by the officers of the provincial administration is very active and is subject to strict rules. The approval of the provincial commission is required for the grant of loans exceeding a certain amount.

The provincial hypothecary advance institutions are, for the rest, organised in a thoroughly commercial way in conformity with the methods

adopted in banking houses. The costs of management are covered by a small percentage paid by the borrowers. It is generally ¾ % on the outstanding capital, in the case of loans granted to small landowners, and ¼ % for the other loans secured on property. Nevertheless, the proportion varies according to the establishment. The provincial hypothecary advance institutes are bound to form a reserve fund. The maximum amount of this fund is sometimes determined but in other cases unlimited. The fund itself is formed with the savings and profits of the undertaking arising from the investment of the cash surpluses and from unexpended receipts.

The " Galizischer Boden-Kredit-Verein " puts ½ % or 1 % of the amount of the loan to the reserve fund. The " Provincial Bank of Bohemia " forms a reserve fund to an amount equal to 50 % of the hypothecation bonds it has issued ; the surplus is used for the redemption of these bonds.

The object of the reserve fund is : *a*) to meet payments temporarily and cover losses if any ; *b*) to allow borrowers facilities for the payment of the annuities, in case of crop failure due to the effects of bad weather ; *c*) to promote the redemption of the land bonds of the Bank ; *d*) to form with the surplus, premiums for bonds participating in premium drawings or to be used for purposes of public utility, as the Diet may decide.

The provincial hypothecary Institute of the Tyrol employs the surplus of the reserve fund in favour of its hypothecation debtors.

The reserve fund must be invested in trustes stocks or deposited subject to short notice in trustworthy savings banks or financial establishments; it may likewise be devoted to advances on trustee securities. It can never be used for current business.

It should be noted that the provincial administration collaterally guarantees the liabilities contracted by these institutes.

Several provinces have also endowed their respective institutes with a foundation capital, or have advanced considerable sums to them,

One of the principal objects of the provincial institutes and the provincial hypothecation loan banks relatively to agriculture is not so much to grant new loans as to convert the already existing high interest loans on the security of property into redeemable hypothecary loans at a lower rate of interest. This operation tends gradually to relieve the encumbrances on landed property. That is the point of view from which these establishments must be considered, not that of the higher or lower amount of turnover. Their sphere of activity chiefly comprises small and medium holders who would be otherwise at the mercy of private capitalists ; for as the loans granted to these classes of land holders are relatively inconsiderable in amount, the other land loan undertakings which endeavour to realise profits need not bother about them.

The lender (the provincial institutes and hypothecary banks) is unable except in certain cases to call in the hypothecary loans granted, but they may be repaid at any time by the borrower without any premium. These advances on property are not conditional on a given mode of use of the money, and the debtors are not subject to the supervision of the provincial

institutes in that respect. Nevertheless in the case of loans for land improvements the grant is conditional.

The loans bear fixed interest during their entire currency and are usually issued in the form of land bonds. The hypothecary Bank of Bohemia alone pays the amount in cash. The grant of the loan in land bonds may be made in two ways : *a*) the borrower, by a clause in the deed of loan, authorises the institution to sell for his account on the stock exchange the land bonds corresponding to the loan which he has contracted, and to hand him the proceeds of the sale ; *b*) the institute hands the borrower the said bonds and does not sell them for his account except at his explicit request. The former method is the more usual.

The aggregate amount of the land bonds must not exceed that of existing loans. They are on the market in the form of 3 ½ 4 and 4 ½ % securities in circulation for an unlimited period, or else they are repaid by drawings in 36, 38, 41, 42 ½, 51 ½, 54 ½, 56, 57, 57 ½, 59 or 60 years.

Land bonds are secured not only on the property hypothecated but are also guaranteed by the administration as we have already stated ; they on the one hand enable the hypothecary institutes to obtain the necessary financial resources ; on the other hand they form a useful and safe investment for trustee funds. As and when the loans are repaid the hypothecary institutes redeem and cancel the bonds in circulation to a corresponding value. The rate of interest on the loans must be equal to that of the land bonds and the communal bonds ; similarly, the interest on the amount of the bonds must be specified in the same currency. Interest is payable quarterly in advance.

The provincial hypothecary loan institutes, except the provincial Bank of Bohemia, compel their debtors to repay the loan they have contracted by paying in, over and above the interest, an instalment of repayment equal to ½ or 1 % of the capital.

The provincial hypothecary loan institutions have particularly concerned themselves from the commencement of their operations, with the conversion of hypothecary loans of high rates of interest into repayable loans at a lower interest. This is one of the principal and most useful functions of these institutions.

These establishments grant loans from a minimum amount of 200, 400, 600 or 1000 crowns upwards 1) on lands provided they are situate in the territory of the province and appear in the land register ; 2) on buildings entered in the land register and situate in communes comprising one or more villages (that is to say not on isolated constructions), whether or not these constructions are subject to the buildings tax. If the buildings are used exclusively or chiefly for industrial purposes, the institutes do not grant loans on their security. The same is the case with real properties not subject to distraint, such as theatres, mines and bridges ; properties in trust can only be hypothecated up to ⅓rd of their value, which is also true of real properties the *substantia* of which cannot be distrained upon.

The " Galicia land loan Society " the "Galician Provincial Bank" and the "Provincial Bank of Bohemia" fix as the maximum limit of the loan

one half the value of the property. The other institutions lend on the lands up to $^2/_3$, and on buildings up to $\frac{1}{2}$ of the estimated value ; or else on fields, gardens, grass lands and pasturages up to $^2/_3$, and on forests and vineyards up to $\frac{1}{3}$ of their value, reckoned according to the yield ; on houses situate in small villages up to $\frac{1}{3}$, and on those in hamlets and towns up to one half of their estimated value or the yield value.

The provincial hypothecary Institute of Lower Austria, the Land loan Institute of the kingdom of Dalmatia and the Hypothecary Bank of Vorarlberg also grant loans without making a valuation of the property ; in order to do this they take as the basis of the loan the land survey value of the land ; and they add $\frac{1}{3}$ of the insured value of the buildings.

Generally it may be stated that the average amount of the loans granted by all the institutions is slightly below one half the value of the real property security.

As regards the valuation of the property, we may note that the provincial hypothecary Loan Insitutions consider as the land survey value the net revenue according to the land survey multiplied by 20 (Istria, Upper and Lower Austria, Carinthia and Dalmatia); it is multiplied by 24 or 20 according as the wooded portion is or is not the most considerable (Bohemia), or finally it is multiplied by 25 or 20 respectively according as the wooded portion is or is not the greater. This value is taken as the basis. If the property is of great value, a direct valuation is carried out. The " Land Loan Society of Galicia " determines in two ways, at the choice of the borrower, the value of the properties borrowed on : 1) by taking as the basis the land tax and multiplying it by 100 or 200 according to the opinion of the directors' board ; 2) by a direct valuation made by two sworn surveyors. The " Hypothecary Bank of Bohemia " fixes the value of the property to be pledged by taking into account the land tax multiplied by 100, the contract of purchase, the current purchase price for land in the locality, the letting rent, reports of Court surveyors, the opinion of trustworthy persons, and, in the case of small holdings, the opinion of the corresponding branch of the Bank. By way of exception the Bank has a valuation of the properties made by its employees, but only on the application and at the expense of the applicant for a loan. The " Hypothecary Institute of Lower Austria " and the " Hypothecary Bank of Vorarlberg " sustain the cost of surveys made by their employees, in the case of loans on rural properties.

The State confers on the land bonds of hypothecary loan institutions the rank of trustee securities. It also grants some favours of a fiscal character but of no great importance, these institutions being subject to taxation like the other loan establishments. Nevertheless some institutions enjoy real privilege, such as exemption from stamp duty on all deeds, receipts, etc. (Land loan Society of Galicia), authority to exercise distress against debtors in arrears without previous summons or proceedings (Hypothecary Bank of Bohemia), and authority to recover the annuities and interest in arrears by causing distraint to be levied by the public authorities (Provincial Bank of Galicia).

In order still further to increase the utility of the provincial hypothe-

cary Loan Institutions they must be in close contact with the agricultural population. They therefore endeavour to get into touch with agricultural organisations, either through the agency of the provincial councils of agriculture and the central Federations of cooperative societies or through that of agricultural associations and the Raiffeisen Societies. It is the Raiffeisen Societies which are best adapted to serve as a connecting link between these institutions and the rural population.

§ 2. Amount of loans on the security of property granted by the hypothecary loan institutions at the 31st December 1913.

1) The *Provincial Hypothecary Loan Institute for Lower Austria* (Niederösterreichische Landes-Hypothekenanstalt) had outstanding at the 31st December 1913 Crowns 411,532,000 of secured loans. In 1912 the amount of the loans secured on property was Cr. 403,069,000, in 1911 Cr. 398,856,000. The Institute in question was founded in 1889 by the provincial Diet of Lower Austria and has its seat at Vienna.

2) The *Hypothecary Bank of Vorarlberg* (Hypothekenbank des Landes Vorarlberg), founded in 1899 at Bregenz by the provincial Diet of Vorarlberg, showed at the 31st December 1913 a total of loans on the security of property of Cr. 17,609,338, against Cr. 17,651,934 granted in 1912.

3) The *Hypothecary Bank of the Margraviate of Moravia* (Hypothekenbank der Markgrafschaft Mähren), founded at Brünn in 1876 by the provincial Diet of Moravia, held on the 31st December 1913 a total of hypothecations of Cr. 177,350,000 as against Cr. 170,764,000 in 1912 and Cr. 168,020,000 in 1911.

4) The *Provincial Bank of Bukovina* (Bukovinaer Landesbank), founded in 1900 at Czernowiz by the provincial Diet of Bukovina, closed its financial year 1913 with Cr. 23,036,304 of hypothecary loans.

The amount of the hypothecations possessed by this institute during the preceding period (1908-1912) fluctuated between 20 and 23 million crowns.

5) The *provincial Hypothecary Loan Institute of the princely County of Gorizia and Gradisca* (Landes-Hypothekar-Kredit-Anstalt der Gefürsteten Grafschaft von Görz und Gradiska), founded at Gorizia in 1903 by the provincial representatives on a resolution of the Diet dated the 29th January 1901, shows in its balance sheet as at 31st December 1913 a total of loans on the security of property of Cr. 18,762,285, as against Cr. 18,338,121 in 1912. The loans granted by this institution have undergone a considerable increase in the course of latter years; they amounted to 9.6 millions in 1908, 10.3 in 1909 and 12.3 in 1910. From 1910 to 1913 the increase was therefore $^1/_3$.

6) The *Provincial Hypothecary Loan Institute of the Tyrol* (Tirolische Landes-Hypotheken-Anstalt) was founded at Innsbruk in 1901 in accordance with a resolution of the Diet of the Tyrol dated the 12th and 15th

February 1898, sanctioned on the 22nd March 1899. The amount of the advances secured on property by this institute at the 31st December 1913 was Cr. 71,823,858, against Cr. 68,910,228 in 1912.

The loans granted by this establishment likewise have considerably increased during the last few years ; they totalled in 1908 Cr. 46,400,000, in 1909 Cr. 53,300,000, and in 1910 Cr. 58,900,000.

7) The *Provincial Hypothecary Institute of Carinthia* (Kärntnerische Landes-Hypothekenanstalt), founded at Klagenfurt in 1896 by the provincial Diet of Carinthia, showed at the 31st December 1913 Cr. 18,221,394 of loans secured in property as against Cr. 17,343,291 in 1912. The increase of the hypothecary loans granted by this establishment during the last few years has also been considerable.

8) The *Land Loan Society of Galicia* (Galizischer-Boden-Kredit-Verein) was founded at Leopoli in 1841 by the representatives of the states forming part of the province. The following is the amount of the secured loans granted by this society during the financial year 1911-1913 :

31st	December	1911	Cr.	249,135,200
»	»	1912	»	252,081,800
»	»	1913	»	260,843,195

9) The *Provincial Bank of the Kingdom of Galicia and Lodomiria with the Grand Duchy of Gracow* (Landesbank des Königreisches Galizien und Lodomirien mit dem Grossherzogtum Kiakau) was founded at Leopoli in 1883 by the provincial Diet of Galicia. The amount of the advances secured on property by this Bank was at the 31st December 1913 Cr. 211,260,000, against 212,035,000 in 1912 and Cr. 202,003,000 in 1911.

10) The *Provincial Hypothecary Institute of Upper Austria* (Oberösterreichische Landeshypothekenanstalt) with its seat at Linz was founded by the Diet of Upper Austria in 1890. The following was the amount of its secured advances during the period 1911-1913 :

31st	December	1911	Cr.	45,890,700
»	»	1912	»	46,411,000
»	»	1913	»	46,624,000

11) The *Land Loan Institute of the Margraviate of Istria* (Bodenkredit-Anstalt der Markgrafschaft Istrien) was founded at Parenzo in 1811 by the representatives of the provinces of Istria. The following is the amount of the secured loans granted by this establishment during the period 1911-1913 :

31st	December	1911	Cr.	25,115,600
»	»	1912	»	29,149,400
»	»	1913	»	32,193,000

12) The *Hypothecary Bank of the Kingdom of Bohemia* (Hypothekenbank des Königreiches Böhmen), founded at Prague in 1864 by the repre-

sentatives of the province of Bohemia, showed in its balance sheet of the 31st December 1913 Cr. 317,618,371 of loans secured on property. The position in regard to secured loans of this great establishment has undergone no great alteration during the last 10 years. We may note however that since 1910 the amount of the loans on property granted by this Bank has slightly declined ; in 1910 for instance their aggregate amount was Cr. 318,900,000.

13) The *Provincial Bank of the Kingdom of Bohemia* (Landesbank des Königreiches Böhmen) was founded at Prague in 1890 by the Diet of the kingdom of Bohemia. The secured loans granted by this Bank from 1911 1913 are as follows :

31st December 1911	Cr.	7,319,000
» » 1912	»	6,974,000
» » 1913	»	6,677,000

In comparison with the previous period the amount of the loans in question has shown a constant decline ; they amounted to Cr. 9,013,000 in 1908, Cr. 7,980,000 in 1909 and Cr. 7,719,000 in 1910.

14) The *Provincial Hypothecary Loan Institute of Salzburg* (Landes-Hypotheken-Anstalt in Salzburg) was founded at Salzburg in 1909 by the provincial representation of the Duchy of Salzburg. At the 31st December 1913 the amount of the secured loans of this establishment was Cr. 5,812,622. During the first year of activity the Institute in question has granted loans on property security for a sum of Cr. 1,200,000, and in 1910 for Cr. 3,200,000.

15) The *Austro-Silesian Land Loan Institute* (Oesterreichisch-schlesische Boden-Kredit-Anstalt) was founded at Trappau in 1869 by the provincial representatives of Silesia. The following shows the position in loans secured on property during the period 1911-1913 :

31st December 1911	Cr.	34,500,000
» » 1912	»	34,818,000
» » 1913	»	36,352,000

16) The *Land Loan Institute of the kingdom of Dalmatia* (Bodenkredit-Anstalt des Königreiches Dalmatien), founded at Zara in 1898 by the Diet of the kingdom of Dalmatia, had in its balance sheet at the 31st December 1913 Cr., 18,609,018 of loans secured on property, against Cr. 17,321,197 in 1912. During the period 1908-1910 the amount of secured loans of this institution varied between 9,8 and 12,8 millions ; the increase therefore was considerable.

* * *

The aggregate amount of the loans on the security of property granted by the 16 " Provincial Hypothecary Loan Institutes " of Austria, was there-

fore at the 31st December 1913 Cr. 1,674,324,385 a considerable figure, which must however not be regarded as the sole indication of the importance of these establishments. As a matter of fact, as we have already pointed out, one of the principal objects of the Austrian hypothecary loan banks and institutes in respect to agriculture, is not so much to grant new loans as to convert already existing loans on property at a high rate of interest into smaller loans at a lower rate and *capable of being repaid:* this action is of the utmost importance since it tends towards a gradual relief of the burden of debts charged upon landed property.

MISCELLANEOUS INFORMATION RELATING TO CREDIT IN VARIOUS COUNTRIES.

DENMARK.

ASSOCIATION FOR ADVANCES ON RURAL LANDED PROPERTY IN THE DIOCESES OF THE DANISH ISLANDS. — 49de Beretning til Repraesentanterne for Kreditkassen for Landejendomme i Östiferne aflagt af Kreditkassens Direktion for Tide fra 1ste April 1941 til 31te Marts 1915.

This association, like the first one considered, is formed of landed proprietors owning medium rather than small holdings. If we group the 410 new mortgage loans granted during the year, aggregating 3,472,000 crowns, according to their amount, we have the following table,

Amount of loans	Number	Total crowns
From 100 to 900	2	1,300
1,000 to 1,900	21	40,600
2,000 to 2,900	37	80,700
3,000 to 3,900	50	162,900
4,000 to 4,900	35	146,900
5,000 to 5,900	34	174,300
6,000 to 7,900	56	365,600
8,000 to 9,900	27	223,900
10,000 to 14,900	56	662,800
15,000 to 24,900	31	551,000
25,000 to 49,900	23	732,000
50,000 to 59,543	6	330,000
Total . . .	410	3,472,000

The table shows that while only two loans are under 1000 crowns, and only six above 50,000, the majority or about 60% range from 1 to 10,000 crowns ; yet, considered from the point of view of their amount, these latter constitute nearly one-third of the entire sum borrowed.

On the 31st March 1915, the association had outstanding 12,622 mortgage loans representing 52,717,066 crowns; the average per loan was there-

fore 12,099 crowns, that is to say below that of the first association which came under notice.

The articles of the association allow of greater liberality in the granting of loans, which may amount to 60 % of the estimated value of the real property offered as security. But the bank always prudently keeps below this maximum limit, and does not, on the average, go beyond 45 %. Indeed the estimated value of the real property mortgaged was at the above mentioned date 440,339,746 crowns, while the total amount of the charges on the same property was 198,923,132 crowns.

Yet it should be noted that in the older mortgages, on which the repayment of the principal has been in progress for a greater length of time, the proportion drops to about 37,4 % ; while in those of more recent date it rises to about 47,9 %. This association is perhaps one of the most important as regards area mortgaged, for the total area of the property on which loans have been granted is about 27,013 hectares. Comparing this figure with that of estimated value of the property itself we have an average value of 1630 crowns per hectare, corresponding nearly to the average value of Danish rural property.

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LOANS AND ADVANCES ASSOCIATION OF LANDED PROPRIETORS IN THE DIOCESE OF FJEN. — Beretning om Kreditforeningen af Grundejere i Fjens Stift i dens 55de Regnskabsaar-1 April 1814 til 31 Marts 1915 aflagt til Repraesentantskabet den 30 August 1915.

The report of this association, unlike those of the associations previously brought under notice, distinguishes clearly between the data relating to transactions on urban landed property and those relating to rural landed property. It shows indeed that at the end of the preceding corporate year the institution had outstanding 6,546 mortgages of an original value of 48,591,500 crowns and a residual value of 4,498,476 cr. and that during the year 1914-15 operations were not very numerous since only 416 new loans were effected, to the amount of 4,436,100 cr., of which 133 were for 1,220,000 cr. in urban districts, and 283 for 2,216,000 cr. in rural districts, while in the working year 1912-1913 the loans were 624 for 11,991,100 cr. of which 359 for 6,945,400 cr. were effected in the country districts.

The average amount per loan is 8,260 cr., being higher (9,173 cr.) in urban districts, and lower (7,830) in rural districts. Perhaps the difference should be ascribed to the greater average value of urban mortgaged lands. In fact the average commercial value of the land was 26,535 cr. in urban districts, and only 18,290 in rural districts, during the year under review.

From the report it cannot be ascertained with certainty whether rural or city landowners have more frequent recourse to the association, because the details of the year's operations are not given; presumably, however, in the early years of the institution, which was founded in 1860, mortgages

on real property in town proponderated over country mortgages. Indeed the earlier series show a large majority of loans granted to town owners; being 2,023 (as against 916 rural loans), and of almost twice the value (about 40 millions as against 22 million). On the other hand in the more recent series, dating from 1906 onwards, mortgages on rural property appear more numerous (2226 as against 1723) and the property itself is of greater value as compared with town property, *viz.* 36,104,650 cr. as compared with 35,496,403 cr.

In all, at the end of the corporate year 1914-15, the association had outstanding 6,888 mortgage loans, aggregating 51,484,800 cr. original principal and 47,728,373 of principal still to be repaid. Of these loans, 3,746 amounting to 29,622,100 cr. had been made in the cities, and 3,142, totalling 21,862,700 in rural centres.

The rapid growth in the operations of this institution during the last five years is brought out by the following table, reproduced from the report:

Financial Year	Original mortgage principal (crowns)	Mortgage principal outstanding (crowns)	Reserve funds (crowns)	Expenses (crowns)
1910-11	37,020,800	34,109,659	986,351	59.82
1911-12	40,861,300	37,718,115	1,074,245	65.54
1912-13	45,105,000	41,779,466	1,170,310	68.81
1913-14	48,591,300	44,984,786	1,260,849	74.08
1914-15	51,484,800	47,728,373	1,340,501	81.48

Lastly it is interesting to note that the cost of management is perceptibly greater than in in the associations previously considered, ranging from 1.5 cr. to 1,5 cr. per thousand crowns of mortgage capital, but in the five years under review these expenses show no tendency either to increase or diminish.

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LOANS AND ADVANCES ASSOCIATION OF RURAL LANDOWNERS IN JUTLAND

Beretning om Kredit-foreningen af jydske Landgendomsbesiddere i det 64 Regnskabsaar fra 1 April 1914 til 31 Marst 1915 : aflagt af Direktionen til Repraesentskabet.

On the outbreak of the war this associations was anxious as to the resulting effect on its operations because the closing of the Stock Exchanges made it impossible to negotiate its bonds in the market, and thus realise the amount of the loans granted. The association thereupon made an agreement with the Commercial Bank, by which the latter undertook to make advances on the best possible terms, on the securities offered by the institution. The agreement however led to nothing because although the Stock Exchange remained closed, quotations, not official it is true, began to be resumed in December.

In this way the work of the association continued almost normal. It granted 2,296 new mortgage loans of a total of 22,331,600 cr. In 1912 cases however, the borrowers were persons who had previously had recourse to the association, of which they had become members, while the number of actual new members was 1,300.

The report contains interesting particulars as to the mortgages granted during the year, which are grouped according to series, rate of interest, area of land mortgaged etc. These data are worthy of special notice, both because they refer to the oldest association of this kind in Denmark, which during its 64 years of existence, working within narrow boundaries (Jutland) has made loans to a total value of nearly 650 millions cr. (nearly 1,000 million francs), and also because it is a typical Danish Land Loan association, founded for the purpose of granting financial facilities to owners of holdings of medium extent. The data furnished by the report are given in the table below ;

	3 %	3 ½ %	4 %	4 ½ %	Total
Nnmber of mortgages	6	159	941	1,190	2,296
Hartkorn (1)	21	523	2,033	2,065	4,641
Area in Tönde of Land — Fields	182	7,190	30,931	34,337	72,640
Area in Tönde of Land — Meadows	58	1,479	4,898	4,534	10,971
Area in Tönde of Land — Marshes	—	134	598	805	1,537
Area in Tönde of Land — Forests	1	538	1,383	1,978	3,890
Uncultivated lands	—	486	1,955	2,805	5,246
Total	241	9,827	39,765	44,459	94,292
Value of buildings insured (cr.)	79,770	2,598,532	10,050,254	10,430,140	23,158,696
Commercial value of landed property (cr.)	242,000	7,356,300	29,098,500	32,374,500	69,071,309
Existing mortgages (cr.)	34,700	999,900	6,420,400	4,283,800	11,730,800
Amount of loan (cr.)	105,800	2,823,800	8,511,900	10,890,100	22,331,600
Total mortgage debt (cr.)	140,500	3,823,700	14,932,390	15,173,900	34,070,490
Average amount of loan (cr.)	17.633	17,804	9,045	9,151	9,774
Proportion between total mortgage debt and value of land %	58.06	51.98	51.31	46.87	49.33

(1) Unit of land measure for purposes of taxation, varying according to the nature of the estate.

The table shows that most of the loans are made at the rate of 4 ½ % ; the number of those at 3 ½ is small, and they are granted in one district alone, in keeping with the special conditions of the locality.

The average extent of the lands mortgaged may be calculated at 41 *Tonde of land*, i. e. 22.5 hectares, usually arable or grass for grazing cattle (about 83,000 T. L. out if 94,000, or about 90 %), and therefore the average value per hectare is high, about 1,500 crowns. The buildings are worth about one-third of the value of the land. As a rule, the average amount of the loans at 4 % is about 9,000 cr. per loan, while for loans at lower interest it rises to 17,000 cr. But taking the loans singly we obtain the following grouping :

Amount of loan crowns	Number of loans
under 1,500	128
from 1,500 to 2,500	184
» 2,500 » 5,000	568
» 5,000 » 10,000	807
» 10,000 » 15,000	263
» 15,000 » 20,000	138
» 20,000 » 30,000	115
» 30,000 » 40,000	45
» 40,000 » 50,000	18
» 50,000 » 100,000	23
above 100,000	7

The majority of the loans (a little more than half) range from 5,000 to 20,000 crowns, and correspond as above stated, to holdings of the average va.ue of from 10,000 to 40,000 crowns, since in the case of this association also it is found that the proportion between the mortgage debt and the value of the property is about 50 %, which seems to be invariabl maximum limit for all land loan associations in Denmark.

The Landowners Loan Association of Jutland works almost exclusively in the countryside, though in the report the transactions of rural and urban districts are not kept separate.

At the end of the year 1914-1915 its position was prosperous, with 35,562 members, — who had in all contracted 54,590 loans, amounting to 437,933,500 cr. — and a reserve fund of 18,522,458 cr.

The cost of management did not exceed 216,802 cr. i. e. less than 0,5 cr. per 1,000 cr. of capital lent, which is a very small proportion. Finally it is interesting to observe that in spite of the large amount of the loans granted, the association at the end of the financial year had only one single holding mortgaged for 4,000 cr. left on its hands, but it was about to be sold without loss.

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LOAN ASSOCIATION OF LAND-OWNERS IN COPENHAGEN AND ITS NEIGHBOURHOOD. Bericht an die Repraesentantenschaft des Kredit-vereins von Grundbesitzern in Kopenhagen und Umgegend für das 32 Rechnungsjahr, von 1. Januar 1914 bis zum 31. Dezember 1915.

We have reserved this institution for the last, because it is a special type of loan association differing in most respects from those hitherto considered. In the first place, it works in a very small area, comprising only Copenhagen, the capital of Denmark, and its immediate neighbourhood ; its functions are therefore definitely limited ; its members are recruited from a very restricted class , *viz.* only the owners of real property in the capital. It has therefore a character of its own, which is shown in the value of the mortgaged property, and the average amount of the loans, and also in the nature of its transactions, because the articles allow of loans on the security of a second mortgage. The association thus forms a link with the with the other group of associations to be described later.

It is as well to observe straightway however that the loans secured by second mortgages are very few; only 40 out of a total of 2,987 existing at the close of the financial year, — i. e. rather more than 1 per cent, — while their value amounted at the end of 1914 to 2,780 700 cr. out of a total of 161,189,100 that is, 1.7 %.

Few associations have been so successfully managed as this : during the 32 years of its existence there has not been one ore of loss, and on the 31st Dec. 1914 (the financial year of this institution begins on the 1st Jan. instead of the 1st April in each year) not one holding remained in the possession of the association. This seems to be due to the great care with which the management has surveyed the land offered for mortgage; making a rigorous and accurate investigation of each holding every three years.

Its business has been indeed remarkable in every aspect. Though working within a very limited area it has in 32 years granted loans to the value of 206,452,400 cr. — nearly 300 millions of francs, making an annual average of nearly ten millions of francs. Owing to the nature of the advances, repayments have been much more regular than in the other land loan institutions we have described, 45,263,300 cr. having been repaid, the mortgage principal amounting on the 31st. Dec. 1914 to 161,189,100 Cr.

The report unfortunately gives no details of the transactions of the last financial year. It merely states that during the year there were 106 new loans granted, of a total of 5,200,700 cr. but nothing is said of the value or the situation of the mortgaged property, or the average amount of the loans, etc.

Still, it is possible to gather more exact details as to the general situation of the institution on the 31st Dec. 1914.

At that date the loans outstanding were 2,987 mortgaged on lands of the value of 334,505,236 cr. The average value of the mortgaged land is 111,987 cr. These figures alone show the different character of the institu-

tion, since in associations among small proprietors, we saw that the average value of the mortgaged property was about 5,000 cr. and in the others it rose to 30 or 40,000 cr., while the Copenhagen association exceeds twice this last average.

Of course the average amount of the loan is very high, going up to 53,964 cr., the aggregate of the loans being 161,189,100 cr. But here as in the other institutions under consideration, we find that the proportion between the total debt on the land (163,545,763 cr. including in this sum the pre-existing advances by the institution) and the value of the property itself always remains below the 50 % already mentioned. In the present case it is 49,9 %.

The high average value of the holdings, and of the loans upon them has produced another result favourable to the institution; that is the small cost of management, which in 1914 was 131,675 cr. i. e. only 0.12 cr. per 1000 of mortgage capital, the smallest we have hitherto found.

In conclusion, it may be stated that the war does not seem to have placed any obstacle in the way of the association, which fact perhaps is due to either to its limited sphere of action, or to the circumstance that it caters almost exclusively for large estates in a city where in a crisis like the present it is easier to realise the bonds issued in the course of loan transactions.

EGYPT.

THE OPERATIONS OF THE « CRÉDIT FONCIER D'ORIENT » IN 1914.-1915. — *L'Information*; Paris, 7th March 1916.

The mortgage operations of the Company, which it had been intended should extend to the Balkan kingdoms and the Ottoman Empire, have remained confined to Egypt. In that country alone has it been able, up to now, to make its investments, which amount to more than 31 million francs.

The mortgage loans of the Company cover both rural estates and city property. The proportion of each of these two classes is 41.66 % for rural advances and 58.34 % for town advances. Almost the whole of them have been effected in the different provinces of Lower Egypt, and in the towns of Cairo, Alexandria, Tantah, Mansourah, Damietta and Suez.

In addition the Company has appropriated a sum of nearly 8 million fr. for advances to a branch, the *Caisse auxiliaire foncière*, whose operations supplement the mortgage investments proper of the Company. The *Caisse auxiliaire foncière* advances loans to the owners of *wakouf* properties. Under the law of the Koran, the capital in these properties remains inalienable and non-transferable, but the income remains at the disposal of the beneficiary and may be made over to third persons. The security for the loans effected by hthe *Caisse auxiliaire foncière* consists in the transfer

of the income, which is effected to it, together with a life insurance. In the event of non-payment of the yearly amounts, the *Caisse auxiliaire foncière* is entitled to demand the sequestration of the property serving as security, so that in many cases it is itself authorised to collect the revenue and thus obtains a maximum security. Legal precedent is fairly fixed on this point.

The European war has had a noticeable reaction on the economic situation of the country. It is well kown that cotton is the principal item of production. The two cotton crops for 1912 and 1913, quite satisfactory from the point of quantity and price, had brought fairly considerable sums into Egypt ; a successful reform of procedure in matters of real property had contributed to the termination of disputes pending for a long time by expediting the proceedings for expropriation ; finally, the execution of a great scheme of drainage, the carefully studied system of which was to cover the whole of the north of Egypt, perforce tended to enhance Egyptian land very considerable in value.

The whole of these factors, to which others of minor importance were added, placed the Egyptian market on a very healthy footing, so that one might justly have anticipated a fresh economic expansion.

The war of course made all these results doubtful. Towards the latter months of 1914, while the cotton crop was deficient, the growers experienced insurmountable difficulties in effecting its sale owing to the prices in the carrying trade and the stoppage of industry. This led to a collapse of prices, by which landed proprietors were hard hit.

This crisis affected the *Crédit Foncier d'Orient* in particular; the growers and cultivators, who had difficulty in paying their taxes, were still less able to meet their liabilities to their mortgagees. Town rents passed through a similar crisis, aggravated by a moratorium which tied up considerable deposits. It became difficult to get in debts, and the item of « Annual payments in arrears » swelled proportionately.

The direct consequence of this economic crisis was the necessity on the part of the Company to avail itself of the moratorium towards its bond holders, and to postpone the payment of its coupons to the same extent as its debtors were themselves in arrears to the Company. Nevertheless the sums got in have allowed of payment of the coupons after a postponement of some months only, and at the present time the arrears cover only one coupon of each of the series of bonds.

At the same time, every legal precaution was taken to render secure the outstanding debts of the Company, and also to preserve the security intact. In some cases only expropriation became necessary ; the *Crédit foncier d'Orient* has up to now had only two estates left on its hands, representing a capital of 612,902 francs 68. It is waiting for more favourable circumstances to realise these.

The economic crisis in Egypt is, for the rest, now subsiding. Though not yet what they should be normally, the payments now come in more easily. Since the close of the financial year, the *Crédit foncier d'Orient* has had more than 800,000 francs of receipts, while it had only had one

third of this sum in the corresponding period of 1914. This is the happy consequence of the resumption of business and the more advantageous sale of cotton, the 1915 crop of which yielded about 4,750,000 cantars (a cantar is 45 kilogrammes). It is certainly not a satisfactory crop, because those of 1912 and 1913 had been about 7,500,000 to 7,700,000 cantars. The deficit in the production of 1915, however, was partly made up by for the textile quality and the high selling price. While at the end of December 1913 Egyptian cotton of medium quality fetched 11 fr.50 per English pound at Liverpool, falling to 7 fr. 18 in 1914, it rose to 12 fr. 25 on the same date in 1915. This is a noteworthy improvement ; therefore exports from the port of Alexandria from September 1st to 29th December 1915 amounted to 352,264 cantars, while they had only been 260,992 cantars during the same period of 1914.

FRANCE.

COMPANIES ENGAGED IN MAKING ADVANCES ON REAL PROPERTIES AND THE WAR. — According to Cayral (Emile), in the *Avenir de la Mutualité* of the 1st May 1915.

It would be fruitless to endeavour to enumerate, much less to measure the disturbances which the war has occasioned in the operation of Companies for advances on real estate. An institution the basis of which is loans to the small holder, and above all the small trader, must necessarily suffer either directly or by reaction from the ravages and misfortunes of the war. In the invaded departments, where these very Companies were so flourishing, bombardment and fire has partly destroyed the real property forming the security, and often the family of the borrower is dispersed and impoverished, if not ruined. In other regions the real property is intact, but some of the borrowers are with the colours ad the others unemployed, which perforce occasions delay in the payment of the interest due and the redemption of the loans and these arrears become formidable for those who return to their homes ill, injured, incapable of earning the big wages in view of which they had courageously shouldered the debt, confident in their future saving powers.

Nevertheless, when better times come, real property loan Companies will resume their career of expansion, and find an entire new connection of workmen desirous of settling down to family life, with all the encouragements and all the financial assistance of the State, whose rightly understood interest is closely bound up with their productive activity. Furthermore, even now, if their connection alone be considered, the losses which they sustain or which threaten them are neither so extensive nor so irreparable as they appear at first sight.

In order to judge of the losses resulting from the destruction of the security pledged, combined with the insolvency of the borrower, precise information as to the position of the Companies in the north of France

must be awaited. It must straightway be remarked that the mortgagee Companies are entitled in principle to an indemnity representing the value of the rural property destroyed, in the distribution of the credits appropriate for that purpose in the budget. The State, in this respect, is in the same position as Insurance Companies paying the value of the burnt property would be, if it were not a question of claims due to the war risk, that is to say, claims categorically excluded from the insurance.

Whether or not the property mortgaged is destroyed, the Companies will, financially at any rate, sustain no loss by reason of the many deaths of borrowers occurring during the war. For all the loans prior to the decree of the 7th September 1914, the insurance against death made obligatory by law and contracted with the National Office would, without additional premium, cover the risk of war. For loans subsequent to the same decree, which indeed are very few, this risk must likewise have been covered, where it existed, by means of an additional premium which has been advanced by the Companies.

The real danger for the Companies lies in a retardation of their collection of payments from borrowers with the colours or out of work. Even these arrears however will be limited to the duration of the war, and consequently would be relatively easy to pay off where able-bodied men are in question. For the sick and wounded, and also for borrowers with a family who have lost the son or sons who afforded them assistance in making their annual payments, these arrears may grow and prove irrecoverable. This is the point which inspires most anxiety, but towards these unfortunate borrowers the Companies must exercise their ingenuity in order to find acceptable methods of paying off so as to avoid the brutal fact of expropriation. The *Société de crédit immobilier de la Gironde* (Gironde Land Advances Company) already pursuing this course, has formed a special reserve for « gratuitous provision for specially unfortunate borrowers with the colours ». This provision will in most cases consist in advancing an additional insurance premium by which it will be possible to allow the borrower the same time for paying off his arrears as for the principal not yet due.

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RECORD OF MOVEMENT IN REAL PROPERTY MORTGAGE COMPANIES. — *Bulletin de la Société française des Habitations à bon marché*, October-December 1915.

The articles of the following companies have been approved by decrees of the Minister of Labour and Social Provident Measures, under the dates given below in parenthesis :

Société de crédit immobilier de l'arrondissement de Troyes pour l'encouragement à la petite propriété (Real property Advances Company of the district of Troyes for the encouragement of the small holder), with its chief office at Troyes (15th July 1914) ;

Société de crédit immobilier de Toulon (Toulon Real property Advances Company), with its office at Toulon (16th July 1914) ;

Société de crédit immobilier de la Loire-Inférieure (Real property Advances Company of the Loire-Inférieure) with its seat at the prefecture of Nantes (10th August 1914) ;

Société de crédit immobilier d'Avallon (Real property Advances Company of Avallon). Chief office at Avallon (Yonne) (25th August 1914) ;

Société de crédit immobilier de l'arrondissement d'Orange. (Real property Advances Company of the District of Orange). Chief office at the Savings Bank of Orange (Vaucluse) (31st August 1914).

On the other hand, by decree of the 11th November 1914, a resolution of the General Council of the Seine, dated the 8th July 1914, was approved, by which the General Council of the Seine decided to give the guarantee of the Department to the *Société centrale de crédit immobilier* (Central Real property Advances Company) for the paymnt of the annual sums corresponding to the additional advance of one tenth which the said Company will have received from the State.

This guarantee will apply exclusively to the annual payments corresponding to one tenth of the value of the real property to be erected during twenty-five years, and for a sum of 50,000 francs per year.

By means of an appropriation from the general resources of the departmental budget, provision will be made for the expense which may possibly result from the engagement contracted by the department of the Seine.

RUSSIA.

THE OPERATIONS OF THE STATE LAND BANK FOR THE NOBILITY IN 1914.

The activity of the State Land Bank of the Nobility during the second half of 1914 has been greatly limited owing to the state of war. An ordinance of the Committee of Finance sanctioned by the Emperor indeed laid it down that before granting new mortgage loans the Bank must have a normal average survey made of the property offered in mortgage, and that no additional mortgages can be granted on properties already mortgaged to the Bank before the period of 5 years has expired from the date of the first mortgage.

Almost all the operations effected by the Bank during the financial year under review bear the trace of these enactments. The issue of land bonds, which had reached the sum of Roubles 45,075,800 during the first half of the year, fell during the second half to R. 25,062,700, while usually in previous years it amounted to an equal figure. The number of loans, their aggregate amount and their average amount have likewise undergone some diminution in comparison with previous years, as is shown by the following table :

Year	Number of loans granted	Aggregate of loans	Average amount of loans
1909	786	49,701,600	63,200
1910	1,248	87,125,400	69,800
1911	1,355	88,842,600	65,600
1912	1,486	109,314,100	73,500
1913	1,425	146,082,000	102,500
1914	1,292	114,290,400	99,500

The aggregate amount of loans is therefore notably less, and the difference is still more remarkable if it be taken into account that in 1913 the total of the loans had undergone a large increase, rising from R. 109,314,100 in 1912 to R. 146,082,000. Nevertheless, in comparison with 1912 the aggregate amount of the loans granted in 1914 is higher by 5 million roubles.

Out of 1292 loans granted, 443 were secured by first mortgage, and 849 by mortgages of lower rank. The 1292 real properties mortgaged had an area of 1,123,808 dessiatines, and their estimated value was R. 1897,637 213, or 176 roubles per dessiatine. The total of the loans granted — R 114,290,400 — gives on the other hand an average of 102 roubles per dessiatine.

Almost all the loans, or 98 % in number and 99 % in amount, were, as in previous years, long date loans, generally 61 years and 8 months or 66 years and 6 months.

The 849 properties on which second mortgages were applied for had an area of 688,170 dessiatines and were valued at R. 140,586,748, but the loans granted by the Bank only amounted to R. 81,148,100.

The proportion between the area of the properties upon which a second mortgage was granted and that of the properties offered for first mortgages has fallen by 1.4 %, while the estimated value has risen from 108 to 204 roubles, that is to say it has almost doubled, and at the same time the amount of the loans granted has gone up from R. 66 to R. 130 per dessiatine. The increase is due principally to the fact that the value of the land has grown regularly during the last few years owing to causes of an economic character generally and an agricultural character in particular, which tend to increase the productivity of the land and facilities of cultivation.

The average area of the properties mortgaged was, in 1914, 984 dessiatines, or twice that which had been found until then (505 dessiatines). The majority of the properties mortgaged (57.1 %) are of medium size, that is to say, between 101 and 1000 dessiatines ; 26.2 % were small estates (up to 100 dessiatines) and 16.7 % only were large estates (more than 1000 dessiatines). The number of mortgaged properties sold during the year amounted to 2,588, representing an area of 645,276 dessiatines and charged with a mortgage debt of R. 33,679,500. These properties passed to the following classes of landowners :

	Number of properties	Area in dessiatines
To the hereditary nobility	592	351571
To institutions	53	18,719
To peasants	1,605	176,189
To commoners	77	11,240
To traders	51	18,623
To other classes	210	68,934
Total	2,588	645,276

In the course of the last 6 years the following were the transfers of the real properties mortaged as security in favour of the Bank, to the same classes of owners :

	1909	1910	1911	1912	1913	1914
Nobility	323	457	460	508	406	352
Institutions	80	41	41	22	21	19
Peasants	371	434	380	275	246	176
Commoners	19	21	28	20	16	11
Traders	23	33	43	48	31	18
Other classes	73	99	135	114	83	69
Total	889	1,085	1,094	987	805	645

The amount of book debts of the Bank refunded before maturity was in 1914 R. 10,075,481.80, divided over 1124 real properties with a total area of 183,702 dessiatines. Of this number, 571 (with an area of 183,617 dessiatines) passed into the hands of owners who did not belong to the nobility.

The amount of the loans refunded before the due date has greatly varied of late years ; these variations are due, among other things, to the operations of the peasants' Bank. Until 1907, this Bank bought the property with its own capital and took over the mortgage encumbrance thereon, but since 1908, and still more since 1912, the freedom of the Bank in this respect has been materially restricted by an order of the Ministry of Finance, by virtue of which it buys a smaller number of real properties

and transfers the mortgage debts with which they are encumbered to the Bank of the Nobility by means of annuities paid in advance.

The Bank has, in 1819 cases, granted its mortgagors the right to charge the property mortgaged in its favour with other private mortgages. These latter mortgages covered 978,932 dessiatines valued by the Bank at Roubles 107,121,813 on which they placed a charge of R. 61,271,040 or 57 % of the estimated value of the property.

The Bank has furthe more granted 220 loans against bills of the Imperial Bank, taking a mortgage on 220,562 dessiatines of a value of R. 26,251,330 ; the mortgage debt amounted to R. 13,695,135, or 52 % of the value of the property.

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At the end of 1914, the mortgages outsanding in favour of the Bank amounted to Roubles 844,451,876 ; there were furthermore R. 26,919,604.28 of instalments in arrears and also a book-debt carrying no interest and a special book debt amounting to Roubles 1,397,354,11. Finaly the credit balance of the Land Bank of the Nobility in the Peasants' Bank amounted at the same time to R. 165,776,865.25.

The mortgaged properties on which the instalments of repayment due in 1913, had not been paid were put for sale in 1914. The following are the figures available in reference thereto :

	Year 1914	
	May	November
Properties put up for sale . . .	3,080	2,736
Area in dessiatines	1,803,359	2,169,956
Mortgage debt (roubles)	108,313,748	147,857,006
Instalments in arrears	3,699,382	4,990,395

Therefore, in all there were 5816 properties put up for sale ; in 5824 of them, however, the sale was stopped by payment of the arrears. In 1988 other cases the sale could not be carried out, the debtors being covered by special privileges. Of the remaining 14 properties 12 were sold and 2 left on the hands of the Bank. The 12 properties sold had an area of 10,903 dessiatines and were charged with a debt of roubles 686,973 ; the sale, on the other hand, yielded R. 689,203. These properties were also charged with private mortgages to the amount of R. 749,183.

At the end of 1913 the Bank remained the owner of 130 properties with an area of 38,571 dessiatines, most of them situated in Transcaucasia.

The Land Bank of the Nobility posseses the following resources :

Bond	
3 ½ %	390,700,500
4 %	146,846,600
4 ½ %	221,924,900
5 %	151,348,700
5 % with premiums	113,822,079
Total	1,024,642,979

The reserve capital, which was R. 9,388,379 rose in 1918 to roubles 12,583,618,35, and the " intangible " fund formed on the 23rd February 1913 on the occasion of the tercentenary of the reign of the House of Romanoff amounted to R. 10,000,000.

The real properties of the Bank (in addition to landed estates) were valued at R. 1,352,600 and the securities at R. 17,373,992.16.

The receipts having amounted to R. 5,413,255.85 and the expenditure to roubles 2,107,811,02. the net profit was R. 3,233,441.83. On comparing this latter figure with the profit obtained by the Bank in the previous year, or R. 2,885,518, it will be seen that the net profit for 1914 was, in spite of the restrictions placed on the activity of the Bank, R. 435,926.82 higher.

SWITZERLAND.

OPERATIONS OF THE " BASLE RURAL MORTGAGE BANK OF LIESTAL ", in 1915. — Geschäftsbericht und Rechnung der Basellandschaftlichen Hypothekenbank in Liestal über das Jahr 1915, Lüdin and Co. 1916, p. 26.

The report of the management of this Swiss Mortgage Bank just published shows the excellent position of the undertaking and the constant growth in its financial activity. The aggregate turnover at the end of 1915 shows an increase of more than 4 millions over the figure observed at 31st December 1914, or francs 71,252,700 against francs 67,227,296, in 1914.

The balance sheet of the establishment at 31st December 1915 closed with an aggregate figure of frs. 68,498,728 both assets and liabilities ; the assets of course including the mortgage loans, which amount to frs. 63,018,901.

In 1914, the mortgage loans granted by the above mortgage Bank amounted to frs. 62,863,490.

Part IV: Agricultural Economy in General

GERMANY.

THE ACTIVITY OF GERMAN LAND SETTLEMENT COMPANIES IN 1914-1915.

SOURCE:

DIE TÄTIGKEIT DER DEUTSCHEN ANSIEDELUNGSGESELLSCHAFTEN IM JAHRE 1914-15. (*Archiv. für Innere Kolonisation*). Berlin, Vol. VIII, October, November, December 1915.

The work of German land settlement Companies, during the year of operations 1914-1915, may be summed up as follows:

I and II. — The Company having its seat at Konigsberg (*Ostpreussische Landgesellschaft*) has hitherto been unable to produce its report, which is also the case with the Hanover settlement Company (*Hannoversche gemeinnützige Ansiedlungsgesellschaft*).

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III. — The *Pomeranian Land Company* (*Pommersche Landgesellschaft*), a company with limited liability having its head office at Stettin, has had to record a general decrease of all operations of purchase and sale owing to the war.

Purchases. — Up to the commencement of the war, 97 estates of an area of 51,400 hectares had been offered to the Company. Since the war, offers have been limited to 7 estates aggregating 4,997 hectares. During the entire corporate year therefore there have been 104 offers of real holdings representing 55,397 hectares, while the year 1913 had brought offers of 183 pieces of land with an area of 91,573 hectares. The Company has purchased 4 estates with an area of 4,615 hectares for the sum of 4,160,000

marks. In the previous year, it had bought 7,393 hectares for 7,422,409 marks. The average price, which was 1,004 marks per hectare in 1913-1914, dropped to 901 marks.

At the start of the year, the *Landgesellschaft* still held 4732 hectares of which 2387 h. have been sold and conveyed to the purchasers in the course of the year. Thus, including the 4615 hectares acquired during that corporate year, the Company possessed 6960 hectares at the time when its report was prepared; 11 independent farms, comprised in this area, are administered by the Company itself. Until the end of the war, the Land Company will confine itself to continuing the regular working of these concerns.

Settlement Work. — The sales operations were satisfactory until the outbreak of war. The *Rentengüter* created in Hither Pomerania were above all in demand. The last *Rentengüter* left over from the settlement work undertaken in 1913 were sold after the abrogation of the administration which had been organised *pro tem.* At the same time the Company completed its methodical process of settlement of workmen (*für Arbeiterrentenstellen*) in two places. No settlement plan has yet been prepared for an estate purchased in 1913 or the 4 holdings acquired in 1914. In 1914, 66 *Rentengüter*, with an area of 1468 hectares, were sold.

The activity displayed in colonisation by the *Pommersche Landgesellschaft* (II) which succeeded the old *Pommersche Ansiedlungsgesellschaft* (I), may be summed up in the following table.

Company	Properties purchased for parcelling out.		Rentengüter created.	
	Name	Area	Name	Area
I	69	32,088 hec.	1306	22,510 hec.
II	35	20,529 »	532	8,743 »
Total . . .	104	52,517 hec.	1838	31,253 hec.

The *Rentengüter* created in Pomerania by the two settlement Companies up to the end of 1914, may be classified as follows according to their area :

	Less than 2 ½	From 2 ½ to 5 h.	From 5 to 10 h.	From 10 to 25 h.	From 25 to 100 hec.	More than 100 h.	Total
I	152	56	233	712	127	26	1,306
II	82	24	74	308	30	14	532
Total . . .	234	80	397	1020	147	40	1,838

To this total there are added 158 extension sales which are subject to the payment of an annual charge (" *gegen Rente* ").

The unsteady prices of the 3 ½ % securities (*Rentenbriefe*) rendered

it difficult to carry out land settlement successfully on a well organised financial basis, and therefore 4 % securities were recently issued.

Up to now no objection has made to the issue. It is for the rest impossible to pronounce a definite judgment on this question, under present circumstances.

Improvements. — Big improvements were again undertaken in 1914. The Company was compelled to suspend this work on the outbreak of hostilities; nevertheless 50 hectares of marsh and waste land were improved. A sum of about 20,000 marks was again placed at the disposal of provident funds in order to assist in the purchase of fruit trees, chemical manure, seeds, etc. This money is utilised in the different settlements.

Consolidation of Title. — The work of consolidation of title (*Besitzbefestigung*) was entrusted to the Company in 1913. To the applications made at that time there were added during the last year of operations, until the war began, 4 applications for consolidation made by landowners and 131 made by peasants. Hitherto 31 applications by land owners and 297 by peasants have been dealt with, but during the last financial year it has been impossible to carry out any operations of this kind.

Applications for consolidation of holdings relating to large holdings comprised an area of 14,575 hectares.

8 consolidations were carried through to the end of 1914 ; they relate to an area of 4,381 hectares and cost, in addition to the first rank loans of the *Landschaften,* a sum of 1,579,123 marks. We may add on the other hand 85 consolidations of peasant holdings embracing an area of about 2,000 hectares and having entailed a cost of 1,941,232 marks capital redeemable by annuities.

A ministerial decree published at the outbreak of hostilities made it lawful to limit consolidations at the present time to those which had been the subject of State advances or on which notices calling in mortgages had been given.

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IV) — The Silesian Land Company (*Schlesische Landgesellschaft*) at Breslau was founded in April 1913. Its capital is 5,500,000 marks of which one-fourth has been paid up. The Prussian State participated with a sum of 2,750,000 marks.

The objects of the Company are, according to its articles :

(1) The consolidation of rural landed property by regulation of the charges to which it is subject, in those parts of Silesia where the law on holdings consolidation of 26th June 1912 will come into force ;

(2) The increase in the number of farm holdings by the creation of new farms ; the enlargement of already existing farms ;

(3) The settlement of workmen on the land, particularly workmen from rural districts. The Company has two offices, corresponding to the two branches of its operations : the settlement office and the holdings consolidation office.

Settlement on the land is carried out after arrangement with the *Royal General Commission for Silesia and Breslau.*

The consolidation is based on the estimate either of a local savings or loan bank, or the agricultural surveyor of the *Landgesellschaft.*

The consolidation loan which follows the loan, ranking first, of an establishment of public utility, is made as a charge ranking second, up to $^3/_4$ of the valuation made by the Company, or $^9/_{10}$ of the valuation by the *Landschaft.*

The number of applications received for consolidation of holdings was very large during the first year of operations. The war suddenly interrupted the development of the second year.

Purchases. — Since 1913, 7 holdings of an area of 1,159.19 hectares have been purchased. Since the opening of hostilities there have been no further purchases.

Settlement. — Applications for farms were very numerous during the second year. Several contracts were cancelled or postponed owing to the war. The Company was only able to dispose of 314.24 hectares, comprising 27 farms.

Consolidation of Title. — The sphere of application of the law on consolidation of holdings embraces in Silesia, the divisions and districts situated in the Government divisions of Breslau, Liegnitz and Oppeln.

The peasants' co-operative associations have given their entire support to the consolidation of peasants' land holdings; 194 associations already have offered to undertake sureties; 410 consolidations, representing 27,523 hectares, have been undertaken; at present there are in hand 14 consolidations, involving an area of 998 hectares, but, since the outbreak of hostilities no new business has been accepted.

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V). — The rural Bank of Schleswig-Holstein (*Schleswig-Holsteinsche Höfebank*), at Kiel, has taken over the continuance of the *Schleswig-Holsteinischen gemeinnützigen Siedlungsgenossenschaft,* in liquidation. Its activity, as regards consolidation, is confined at present to loans on the rural lands in the north of Schleswig.

No new settlements have hitherto been established.

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VI). — The *Hesse Land Settlement Company,* (*Hessische Siedlungs-Gesellschaft*) at Cassel, has not founded any new settlements during its fourth corporate year from the 1st April 1914 to the 31st March 1915. It has not carried out any sales of land plots for its own account, but those which it was instructed to carry out have enabled the residents to enlarge holdings at a reasonable price and purchasers to keep themselves going in their farms without excessively heavy burdens and to work the rest of their holdings.

The Company has brought down to a normal level the debts of two holders by a sale of part of their property. The complete sale of some lands was made through its agency.

The Company has received the support of the *Landeskreditkasse* in all mortgage business. It has definitively included in its articles the negotiation, for account of others, of farm leases, an operation already successfully attempted during the year 1913-1914. Nevertheless, since the beginning of the war, no farm lease has been negotiated while some sales have again been made through the agency of the Company.

The latter has had the remainder of an estate bought for its account drained and has worked it for the purpose of development.

Another property with an area of 10.47 hectares has been organised with a special view to cattle breeding, first by a farmer hired by contract, and when the latter was called to the colours, by a neighbouring small holder.

Preparatory work has been carried out for the creation of *Rentgüter* and it is hoped to establish a settlement of market-gardening *Rentengüter*, with the assistance of persons disabled in the war.

The Company has been instructed to sell 23 holdings for account of their proprietors, but, above all since the outbreak of hostilities, it has only been able to realise a small portion.

Nevertheless the profit realised in the conclusion of these transactions has allowed of the distribution of a dividend of 4 % and the increase of the reserve funds of the company.

VII) — The *Mecklenburg Land Settlement Company* (*Meklenburgische Ansiedlungs-Gesellschaft*), at Schwerin, has experienced great difficulties owing to the war.

The mobilisation of horses, requisitioned at the moment when agricultural work was in full swing, was a hindrance to farm working; nevertheless the difficulty was soon overcome. The shortage of labour was hardly felt. Where it did occur it was made good by calling in school boys. The results of the rye crop and potato harvest were not fully satisfactory as regards quantity. Everywhere the autumn sowings were completed in time.

The families of settlers suffered through a number of their members being called to the colours. The Company came to their assistance to the extent called for by the existing need. The payments due to the Company were, generally speaking, got in satisfactorily. The sales operations undertaken by the Company, which, up to the war, had been satisfactory in their developement, have since been entirely held up owing to complete absence of demand, and this state of things will last until the end of the war.

The heavy subscription to the war loan has unfavourably influenced the raising of mortgages. To this must be added the heavy charges on the capital borrowed by the Company, owing to the fact that the *Reichsbank* has raised the rate of advances on securities from 5 % to 7 %.

The absence of sufficient profits in land transactions and the losses arising from the difference between the rates paid by the settlers to the Company and the rates paid by the latter for its loans, go to reduce the financial results of the year 1914 and do not allow of the distribution of a dividend.

In all 40 pieces of land, of an area of 628.19 hectares, were sold in 1914.

The changes which occurred in 1914 in the holdings of the Company were as follows :

Holdings at start of corporate year . . .	629.44 hec.
Purchases of land in the course of the year.	665.75 »
	1,295.19 hec.
Sale of 40 pieces of land	628.19 »
Holdings at the end of the year	667.00 hec.

The Company's Office at Rostock has been temporarily closed, its director having joined the army.

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VIII). — The *Landbank Aktiengesellschaft,* at Berlin, has also had its selling and buying operations impeded by the war, at the very moment when land transactions in the ordinary course reach their briskest phase. In normal times, in point of fact, the second half of the year regularly brought with its transactions exceeding two-fold those in the first half, particularly as regards the conclusion of sales.

Many farm managers and hands were called to the colours. The best and the greater part of the draught animals were requisitioned. The goods traffic has suffered frequent interruptions. There have been extensive requisitions of provisions and goods. In short, all the disturbances which the war brings about in farm working confronted the *Landbank* with tasks which it could only fulfil gradually and with difficulty. These difficulties were generally surmounted by sending on to the farms employees of the central administration and of the various offices, and, by mustering the whole of the available strength, the gaps were filled and the difficulties successfully overcome.

Four estates in East Prussia were threatened for some time with invasion by the enemy and suffered losses in buildings. Apart from these estates, the absent hands and draught animals were replaced either by machinery or by the like factors which had become available elsewhere. Thus the harvest was got in in good time; the area of autumn sowings was the same as usual; the preparation of spring sowings was perfectly regular. The required manures and the forage needed for the cattle were procured and ensured.

The falling off caused by the war in the operations of sales and purchases emerges from the following figures :

While in the previous year 11,824 hectares had been acquired or received for management, this figure fell in 1914 to 5.248 hectares, of which 516 were purchased and 4,732 taken over for management.

In the same way, the sales, which in 1913 were 15,261 hectares (of which 9,102 properties belonging to the Company and 6,159 managed), were only 3,675 hectares in 1914, being 1,841 hectares holdings of the Company and 1,834 hectares managed holdings.

According to the particulars for the previous financial years, more than two thirds of the transactions were effected in the second half of the calendar year. It is therefore not surprising that sales operations only yielded in 1914, 8,160,000 marks, against 31,300,000 marks in 1913, 30,800,000 marks in 1912 and 26,500,000 marks in 1911.

Since its foundation the *Landbank* has purchased 248,815 hectares for its own account and 50,294 hectares for account of third parties. As will be seen, its purchases comprised a total of 229,109 hectares.

Against these it sold 241,765 hectares of its holdings and 37,585 hectares for account of third persons, making in all 279,350 hectares.

The total number of purchasers in 1914 amounted to 7,069 being an increase of 127 over the previous working year.

The number of independent small farms created and sold by the *Landbank* rose from 3,523 with an area of 47,107 hectares, to 3,596 of 47,895 hectares., The figure for sales for farm enlargements rose from 2,804 comprising 13,240 hectares, to 2,848 with 13,343 hectares. Finally the sales of independent small farms and already divided holdings (*Restgüter*) rose from 615, with an area of 215,328 hectares to 625, of 218,112 hectares.

The *Landbank*, at the close of the financial year, possessed 7,050 hectares, of which :

2,393	purchased in 1910 or before	(as against 2,584 in 1913)
266	» » 1911	(as against 923 in 1913)
2,247	» » 1912	(as against 3,002 in 1913)
1,696	» » 1913	(as against 1,878 in 1913)
448	» » 1914	

It furthermore had under management at the close of the working year 10,871 hectares, instead of 204 in 1911 ; 869 in 1912 ; 4,954 in 1913 ; 4,844 in 1914.

The total amount of sales of the *Landbank* since its foundation is 354,100,000 marks. Out of this total an amount of 113,200,000 marks on account has been paid, or rather 109,200,000 marks, 4,000,000 marks having been returned to the purchasers in the interest of their undertakings. There consequently results a balance of 244,900,000 marks. The company was unable to cover 24,200,000 marks of this balance, due to recent sales, by a first charge loan. The *Landbank* still holds this sum in the form of first rank mortgages. On the other hand, it has balanced by a

first charge loan 220,700,000 marks, being 177,900,000 marks by loans and 56,700,000 marks by payments on account. Hence there remain 46,100,000 second rank mortgages for the balance of sales, of which 13,800,000 marks have been assigned to third parties. The *Landbank* therefore possesses 32,300,000 marks second rank mortgages (against 33,200,000 marks in 1913) and 24.200.000 marks first rank mortgages for the balances on sales (against 36,900,000 marks in 1913) making an aggregate of 56,500,000 marks (70,100,000 in 1913), which appear in the books under the accounts of mortgages, debtors and *Rentengutsmassen.*

At the close of the financial year 40,700,000 marks balance on sales had matured. Of this amount only 37 millions was paid in. An extension of time for payment beyond this financial year was granted for the remaining 3,700,000 marks.

Of the balances of sale not maturing till 1915, 19.7 million marks were paid in advance.

The payments due from East Prussia, which had fallen into arrears owing to the war, are coming in gradually, as the people return to their homes. The provisional indemnities which the State has allowed also contribute to this result. An extension of time for payment beyond the financial year has been granted in eleven cases, on special grounds.

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IX). — The *Land Company "Holdings for all"* (*Landgesellschaft* "Eigene Scholle)", at Frankfort-on-the-Oder, closed its year of operations at 30th June 1915.

During that year, it received applications for admission from five new members subscribing a capital of 123,000 marks. When their admission has been approved, the capital of the Company will thus rise from 8,289,000 marks to 8,314,000 marks, and the the number of members from 286 to 291.

The offers of estates and lands have been maintained at the ordinary level, but as the general situation holds out prospect of a small number of purchases only, the Company has only taken up an inconsiderable proportion of the lands which have been offered it.

It is interesting to observe that since the beginning of the war the number of lands offered for sale in the neighbourhood of towns has noticeably increased.

The offers of sale comprised:

11 estates of over	500 hect. each	8,120 hectares.
19 large farms »	100 » »	6,700 »
28 farms up to	100 » »	1,290 »
43 lands near towns		573 »
101 estates and lands covering a total of		16,683 hectares.

The purchase operations being stationary and settlement on the lands being at the lowest ebb, the Company, with the assistance of arbitration authorities, entered into arrangements with the *Königliche Rentenbank* in connection with outstanding land settlement business and the taking over by the bank of a number of *Rentengutsstellen*. The Company has thus taken over 740 settlers' farms, of which up to now 437 have been handed to the *Rentenbank*; 201 others are also in course of being delivered over to the *Rentenbank*; there would thus remain only 102, which can only be taken over later, owing to the absence of the purchasers at present in an enemy country, and their insufficient representation.

Except in the *Rentengüter* previously mentioned (17 cases excepted) the preparatory work for conveyance, such as land survey rectifications, release of the lands from incumbrances and mortgages, etc., has been completed on the 239 lands sold for cash up to 30th June 1914.

The war first of all caused a complete stoppage in settlement. Nevertheless small holdings have been more and more in demand since the spring of 1915.

In spite of the stringency of the money market, cash purchases are more numerous than *Rentengutstellen*.

In a number of settlement transactions, *Rentengüter* contracts have been converted into cash sales. Furthermore, a fairly large number of enquirers desire farms to be reserved for them, of which they would take possession after the conclusion of peace.

At the 30th June 1915, the Company had sold 1077 farms covering 11,230.59 hectares, made up as follows:

	Rentengüter		Cash Sales	
	Number	Hectares	Number	Hectares
Sales at 30th June 1914	753	5,636.83	239	1,997.91
Sales in the year 1914-15.	20	70.27	65	3,525.58

According to the data at the beginning of the corporate year 1915-16 the increase in the number of purchasers appears to continue.

In the cash sales during the financial year, one third and up to one half of the selling price was paid on conclusion of the contract; the rest, mostly at the time of conveyance. In any case, there were no mortgages created for balance payment on sales.

Several settlers' families have been deprived of the men who were the family support, and who have gone to the war.

The Company aided them by lending actual assistance, especially during harvesting and sowing. It supplied mechanical threshers free, and seeds, manure and forage at a moderate charge. Other families have had one or more of their members killed or seriously wounded; the Company, in

view of the impossibility on their part of continuing to work their lands, had to take them over and administer them completely being 28 *Rentengutsstellen* with an area of 118,77 hectares. After the conclusion of peace the sale of these farms will probably not be difficult. According to present calculations, the assistance to settlers' families who have suffered through the war has necessitated an outlay of 29,500 marks.

The balance sheet closed with a net profit of 393.527.69 marks.

X). — The Saxony Land Settlement Company (*Siedlungsgesellschaft Sachsenland*) transferred its head office to Halle on the 1st July 1915.

At the outset of the war, its only task was the administration of three as yet unsettled estates. Since then the organisation of small settlements has been added. Finally, it is anticipated that the settlement of industrial workers on the land will assume growing importance in the operations of the Company. The object will be to prevent professional speculators from turning to account the shortage of housing which threatens to make itself felt after the war. On the other hand, it is thought that a kind of economic basis may here be found for the development of the company's operations. Settlement could indeed not be effected without this adjunct, in view of the difficult position in which Saxony finds itself.

The Company has purchased the following for the establishment of small settlements :

	Total area	Purchase Price
2 pieces of land	26.29 hectares	156,658 marks.
2 estates.	63.32 hectares	1,960,000 »
It has sold :		
1 *Restgut*		125 hectares
3 peasant's lands		24 »
4 rural workmen's lands.		5 »
41 small holdings of land (from 0.5 to (1 *morgen*)		7 »
49 pieces of land		161 hectares

A few allotments were also sold for cash for enlargement of farms. We may note that these sales were made during the short period from 1st April to 30th June 1915. The contracts have already been prepared for the majority of these lands. In spite of the prolongation of the war, the sale of small settlements has since then continued satisfactorily.

We may add that the Company proposes to undertake the settlement of disabled soldiers on the Land.

The war has greatly hindered building work, both owing to shortage of workmen and increase in prices of materials. In several cases it has only been possible to complete buildings by resorting to the employment of prisoners of war.

The net profit for the financial year is 145,266.39 marks.

SPAIN.

THE DISTRIBUTION OF RURAL PROPERTY AND LAND SETTLEMENT IN THEIR RELATION TO THE AGRARIAN PROBLEM.

OFFICIAL SOURCES: (1)

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(1) Part of this bibliographic material, and also of the particulars and information contained in this study, were collected directly by a member of our editorial staff, M. JOSÉ LUIS ALCAZAR, during a voyage of study in Spain, on behalf of the International Institute of Agriculture. (Editors).

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INTRODUCTION.

The problems presented by Spanish agriculture have long been extremely manifold and complex, but they have assumed a character of greater intensity since the middle of the last century, that is, since the time when the competition of America, North and South, India, and ultimately Australia, began to make itself felt in Europe, and labourers in town and countryside began to be attracted to those countries.

If it be borne in mind that thousands of labourers emigrate from Spain every year, while the density of population of the country does not exceed 38 inhabitants per square kilometre, that year by year almost, the State and municipalities are compelled to give bread to thousands of agricultural labourers by employing them on works of public utility, while only 43 % of the productive area of Spain is cultivated ; further, that more than a million landed properties (over one half of them rural properties) belonging to tax payers are seized under distress by the Treasury on account of the owners being unable to pay their taxes, that agitation among field labourers is becoming more and more frequent, which is also the case with the attempts sometimes violent, made by Catalonian *rabasseros* to secure permanence of their property rights, and the resistance offered by the *foreros* in Galicia above all, to the recognition and payment of the rents inherent in the system of *foros* — if all this be borne in mind, it will be understood that at the beginning of the twentieth century the various questions agitating Spanish rural classes had assumed a character of exceptional urgency which has compeled their study and solution.

Yet, among all the complex and interrelated though distinct questions which form part and parcel of this problem, there is not one perhaps which is so closely and immediately bound up with it in its three aspects (the agrarian, the agricultural and that of land division) as the question dealing with the distribution of landed property, its accumulation and its excessive subdivision.

The cultivation and development of the large extent of Spanish productive territory which hitherto lies fallow, the introduction of skilled technical and rational methods of cultivation, increasing the present low yield of the land ; the carrying out of permanent improvements on private holdings with the same object, and all the other reforms which aim at increasing agricultural production and retaining on the countryside that part of the rural population which now emigrates cannot be carried into effect, or will yield only meagre results unless, concurrently therewith, an attempt is

made to reform the defective distribution of Spanish landed property and also the relations between owners of real estate and peasants.

The importance of the problem of the distribution of rural property in the Spanish agrarian question is therefore obvious ; and naturally this is the point to which, for some time past, the rural classes of the country and the most eminent economists have directed their attention, calling for the intervention of the public authorities to settle the question.

In the following pages we shall endeavour to describe in a general way the position of Spanish rural property, and the problems to which it gives rise in the legal, economic and social sphere, and we shall conclude by pointing out the various tendencies in connection with the solution of this difficult problem and official action from the same point of view. Nevertheless, in consideration of the insufficiency of the statistical data available, which forms an obstacle to the study of this question in Spain, we think it desirable to obviate this defect by setting out broadly a few historical precedents bearing upon the process of origin of property ownership in the lands of Spain, in its different forms.

1. *DISTRIBUTION OF RURAL PROPERTY.*

§ 1. Historical precedents.

Writers treating of the history of Spanish national economy agree in admitting that the distribution of property must, at the far distant period of the Roman domination, have reached the highest degree of perfection, that is to say, from the point of view considered in this study, « a relationship of excellence between the individual interest and the collective interest ». In support of this opinion they point out that the population of the Peninsula at that time attained the density of 60.5 inhabitants per square kilometre, which has never been equalled at any other time, even the present.

The Visigoth invasion put an end to this position of harmony, and it may be said that, although interrupted accidentally by the Arab domination, it was then that the historic process began which terminated in the distribution of property as it existed at the time of promulgation of the laws providing for the release of properties under mortmain, and the liberation of the properties liable to forced substitution, that is to say, in the first half of the nineteenth century.

The Visigoths deprived the conquered Roman population of two thirds of their property in order to confer its possession (amortizar) on the military classes and the clergy ; in this way vast extents of land were accumulated in few hands, and owing to their excessive area and the insufficient capacity of the owners, they gradually fell out of cultivation and were only used for pasturage. The pasturage system, however, being incompatible with small land holdings, the evil grew apace, that is to say the accumula-

tion of property assumed ever-growing proportions as a natural consequence of the organisation of estates of vast area or *latifundia*.

As we have mentioned, the Arab invasion and domination slightly modified this system with regard to the property of the dominators, but with the « Reconquest » which may be said to have begun at the same time as the invasion of the Agarenians or Arabs of Nedjed, they returned perforce to the previous bad system, because the royal power, owing to its weakness, being under the necessity of making use of the clergy and the nobility to reconquer the country, had to grant important territorial concessions to both. Consequently the power of an anarchical and turbulent aristocracy grew greater and greater, which for many centuries prevented the formation of agricultural middle classes, the only ones capable of obtaining at all times from the land the maximum individual and collective utility (1).

During the « Reconquista » another very important social element appears, the commonalty (estado llano) which serves as an effective support to the Crown for restraining the excessive claims of the nobility.

As, at the same time, the drawing to a close of the struggle with the Arabs reduced the importance of the military power belonging to the noble classes, the latter, in order to preserve their influence in the State, aspired to extending their power in the future, and partly succeeded. Thus, after many vicissitudes, and despite the efforts made in opposition by judicious legislators, the nobility succeeded in getting incorporated into customary law the institution of entail and forced substitution in perpetuity in favour of families, charitable or purely religious associations, which by virtue of these institutions were devoid under law of the power of alienating in any form whatsoever the properties thus settled, though their power of acquisition was not the subject of any like prohibition.

It is necessary to call attention to the slow but continuous interference of the absolute government in the communal properties of the villages, due no doubt to this inalienability of the properties of the clergy and the

(1) In substantiation of what we have said in respect to the accumulation of landed property in the hands of the nobility and the clergy, we will quote some particulars furnished recently by Mr. José M. de Bayo in a lecture before the Association of Spanish Agriculturists. From these particulars it follows that at the time of Philip IV, the revenues of the 5 archbishops and the 31 bishops amounted to a sum equal to that received by the monarch ; and according to the census of 1756, to each lay brother of Castille and Leon there were due 9 ½ measures of land, and to each regular or secular clerk in holy orders 83 ¼.

The military Orders of Calatrava, Santiago, Alcantara and Montesa possessed immense estates. The Dehesa de Serena, in the province of Badajoz, belonging to the Order of Alcantara, and later on divided into several districts, had an area of 102,000 *fanegas* (65,700 hectares). The district of Jerez de los Caballeros which was divided into 200 properties belonged entirely to the Order of Santiago. The Valley of Alcudia, which comprised many villages and had an area of 104,000 hect. belonged to the order of Calatrava.

The domination of the military Orders also made itself felt in Andalusia ; nevertheless the soil of that province was above all monopolised by the nobility, entire districts and not villages merely, belonging to a single family descending from the *reconquistadores*.

nobles, (though in principle the properties of the latter passed to the Crown on the death of the owners).

This interference went to the extent of compelling the sale of a portion of the farmed communal lands (propios) (1), the proceeds being appropriated to the payment of the royal debts or to the purchase of stocks representing such debt, and subjecting the rest to a high tax (10 %) which frequently compelled the communal Councils to dispose of the lands thus encumbered. These alienations and this splitting up of communal properties allowed on the one hand of a greater accumulation of real property in the hands of powerful families or associations, and on the other of the formation of those holdings of extremely small extent which are still found in certain Spanish regions under the name of *nimimifundios*.

Another consequence of the system of inalienability is represented by the institution and development of the dues and charges, perpetual or otherwise, as the owners did not wish to work their immense properties themselves, nor indeed could they. In this way, as we shall see later, the ownership of the land was in process of breaking up, the direct ownership nevertheless remaining in the hands of the privileged classes who did not produce.

It will be seen from the foregoing that the demands which arose in favour of an economic revolution at the end of the XVIIIth century, found Spanish landed property completely paralysed and in the powerd of *mortmain* holders. At the end of the XIXth century the system of *latifundia* therefore still completely prevailed in Spain, the properties which could be considered as small and medium being exceedingly few. The persons who cultivated the land did so as settlers or quit-rent payers, or at most as farmers, and never had the right to anything but a very small portion of the gross product.

§ 2. Land legislation.

If we examine briefly the determining causes to which is due the transition from the land system which prevailed, as we have seen, at the beginning of the last century to that in force at the beginning of the XXth century, we are confronted with the special legislation due to the economic and social tendencies of the time. In order to study this in relation to the land system we may distinguish between direct and indirect legislation in reference thereto, according as its principal object is the distribution of landed property or another object is contemplated. We shall first of all consider the second group, as it comprises those enactments which exerted the greatest influence on the change that took place in the distribution of Spanish rural property.

(1) From a very distant epoch communal lands have been divided into two classes: properties in common usage and properties called *propios*, according as they were employed for communal purposes (pasturage, use of the wood, etc.) without special allotment of a part of the land to each inhabitant, or were farmed out.

The group of enactments which had an indirect action is limited to the laws for release of properties from mortmain (desamortización), and removal of the restriction (desvinculación) on properties subject to forced substitution, to which laws the existence of small holdings and the middle classes in Spain, which were in the first place clearly agricultural, is almost exclusively due. Owing to the legislation directed to releasing properties from mortmain, the principle of forced expropriation on grounds of public utility was applied to civil and ecclesiastical corporations; the enactments relating to the release of properties subject to forced substitution restored the absolute ownership of the properties which had been burdened with this system, breaking with deeprooted traditions and cancelling the perpetuity of dues and charges. Hence. this legislation while promoting or at least affording the possibility of the material subdivision of land holdings, also allowed of the consolidation of ownership rights, that is, of the legal incorporation completing such subdivision from the standpoint of collective interest.

The legislation directed to removal of mortmain is very complete and varied, having been the product of a period of agitation and profound transformation in the political sphere. From the point of view of the present study we may content ourselves with indicating its most important enactments.

The first law, in chronological order, dates from the year 1798, in the reign of Charles IV. It directed the release and the sale by public auction of the real properties belonging to hospitals, homes and asylums, foundlings' homes, *Cofradías*, charitable institutions and lay benevolent societies.

In 1813 the Cortes of Cadiz abolished feudal rights on lands and directed the alienation of State properties, of ruined and closed convents, of the temporal property of the Jesuits and military orders, of one half of the waste land (baldíos), or land forming part of absolutely free properties etc.

In 1820 and during the constitutional period there were passed the laws liberating ecclesiastical properties and removing entail, and as these were abolished by the subsequent anti-constitutional reaction, they were of necessity confirmed in 1836, the provisions regarding the clergy being extended to the properties of the regular clergy, which were not covered by the previous laws.

In 1837 there were declared redeemable all charges or rents resulting from foros, and from leases or the like of perpetual character and dating from before 1800.

In 1855 the law of the 1st May once again proclaimed the general liberation of civil and ecclesiastical property which had remained in abeyance and directed the carrying out of the sale of the properties, estates and rights belonging to the State, the clergy, the military orders, *cofradías*, pious institutions and sanctuaries, the farmed properties and properties in common use of the villages, and all other properties held in mortmain. Since that time, and up to the present, release of properties from mortmain and entail has been continued uninterruptedly.

After having thus briefly traced out the Spanish legislation which had

an indirect though unquestionably effective influence on the distribution of rural property, we shall now pass on to direct legislation, stating however that it is neither so copious nor so effective. Indeed beyond article 806 of the Civil Code and enactments relating thereto, which, by establishing the reserved or lawful share, that is the portion of inheritance which must by law pass to the children out of the properties of the father, imposes on landed property a law of subdivision concurrent with the growth of the population, no other civil, fiscal or land settlement law has made its influence felt in the domain of landed property.

Article 1523 of the same Code aims at averting to some extent the effects of excessive parcelling out, by providing for the buying up or redemption of land between neighbouring owners, though with manifold restrictions in the case of conveyance of property by deed *inter vivos ;* nevertheless the individual interests of contracting parties is almost always successful in evading this enactment.

The laws of compulsory expropriation on ground of public utility only comprise under this latter term actual public works, and the appropriation and limitations of property needed for national defence. The law on water rights only recognises the right on grounds of public utility not of expropriation but of imposing a right of way.

During the period under consideration there were but few laws on settlement, and their effect was small. The most effective among them, namely the one which brought about the placing under cultivation of a large part of the ramifications of the Sierra Morena and the formation of numerous centres of rural population, dates from the end of the XVIIIth century, in the reign of Charles III. Nothing was done in this direction in the XIXth century unless we are to regard as being a measure with a view to land settlement the laws of taxation exemption of the year 1868 for what were then called farm settlement or colonies, that is the agricultural localities remote from urban centres) and generally for all progressive changes towards cultivation, such as plantation, draining of pools and marshes, irrigation work, etc., the efficacy of which laws has been practically *nil* in relation to the distribution of property.

§ 3. Present position of rural property.

We have seen that before the promulgation of the laws aiming at the release of properties from mortmain and entail, the system of Spanish land property was characterised by latifundia, and the accumulation of enormous estates, with all its fatal economic and social consequences, the proportion of Spanish territory represented by small and medium holdings being exceedingly minute. In truth, great transformations were brought about by the above laws in this land system, above all as regards the reduction of the latifundia and the development of small holdings. This notwithstanding, the results anticipated by the legislator from their enforcement

are far from having been realised, as they gave rise to consequences which in great measure neutralise their beneficial effects.

We have classed the above enactments as part of the legislation which directly influenced the division of rural property. It was indeed in these laws only that regard was had to the two-fold purpose of releasing from the burden of mortmain or the "dead hand" (thus designated "not so much owing to its incapacity to alienate as to its incapacity to produce") enormous stretches of land which produced little or nothing, and of abolishing forced substitution and entail, bringing into the class of freely-passing properties those lands which were subject to this system. The major portion of Spanish rural property having been thus subjected to this movement of liberation, and the distribution having been left to itself, it is by no means surprising that it assumed a form which, though unquestionably an advance over its predecessor — which is due, no doubt, to the natural progress of social and economic ideas — is still a long way from being a system which can be considered as not perfect indeed but at any rate satisfactory.

Thus we see that the revolution which set to work so energetically to deal with mortmain properties left the accumulation of landed property, for the greater part at least, untouched. For ridiculous prices, on credit, and sometimes without the expenditure of a farthing by the purchaser, the lands described as national property were disposed of, thus giving birth to another incompetent and absentee class, idle and exploiting the workers, which still further enhanced the evils resulting from the inheritance of feudalism.

The release of properties from mortmain led to the disappearance of the properties of the clergy and the military orders ; the vicissitudes which time brought in its train have cut down the Crown patrimony ; the abolition of the entail and reverses of fortune have reduced the properties of the old nobility ; yet it would be fruitless to deny that, regardless of the hindrances of a feudal character indicated above, there still exist properties of large extent belonging to one family or individual. The following particulars, made public recently by a Spanish lawyer, Señor José M. de Bayo, may serve as an example (1).

In the province of Badajoz 87,912 hectares are divided among 37 landowners ; in that of Caceres 93,123 hectares belong to 12 landowners, being an average of 2,376 hectares per landowner for the province of Badajoz and 7,760 hectares for that of Caceres, besides which it may be mentioned that some of these landowners possess additional estates in other districts or provinces.

With regard to Andalusia, the following data may be considered as approximating very closely to the reality : Almeria 10,660 hectares among 5 landowners, or an average of 2132 hectares per landowner ; Jaén 47,438 hectares among 20 landowners, or an average of 2371 hectares ; Malaga 15,890 hectares among 6 landowners, or an average of 4090 ; Cordova 19,066 hec-

(1) In the lecture cited above.

tares among 10 owners or an average of 1363 hectares ; Cadiz 59,775 hectares among 31 landowners or an average of 1928 hectares.

It is not only in Extremadura and Andalusia however that latifundia exist ; they are found in almost all the provinces, especially in those of Ciudad Real, Toledo and Salamanca, concerning which we can adduce the following figures : In the province of Toledo 34,961 hectares are concentrated in the hands of 11 landowners, making an average of 3153 hectares for each of them ; in that of Ciudad Real 24,071 hectares belong to 8 landowners, forming an average for each of them of 3008 hectares ; in that of Salamanca 22,861 hectares belong to 6 landowners, which makes an average of 3810 hectares.

Summing up the particulars given, we may say that 456,393 hectares belong to 164 individuals, which constitutes for each of them an average of 2782 hectares.

Furthermore the effects of the laws on the mortmain properties are not experienced with equal intensity in all the Spanish provinces, as the degree of splitting up and subdivision of land differs from province to province. It must nevertheless not be supposed that these differences occur in an irregular fashion : on the contrary, they might be said to obey a geographical and historical law. Thus we see that the maximum degree of subdivision of the land and division of landed property is found on the Cantabrian coast and the eastern part of the Mediterranean coast ; from north to south and from east to west the degree of subdivision declines over the plains of Castille, and as we advance towards the south west, latifundia assume a more and more strongly marked preponderance, attaining their maximum in the provinces of Lower Andalusia, (Cadiz, Seville and Huelva), and throughout Extremadura.

The land surveys bring out clearly in an arithmetical form this geographical law of the distribution of property relatively to its extent, but as at the present time figures can only be given for eight provinces out of the 49 which make up the territory of Spain, we must forego this conclusive proof. Despite this, the data already obtained present sufficient interest to be brought under notice. The following are, according to the land survey register, the average of parcelling out of the land and subdivision of ownership in these 8 provinces.

Provinces	Parcelling out of the land	Division of Property
Alicante	1.48	5.50
Madrid	1.67	13.10
Toledo	2.68	16.80
Albacete	3.75	22.10
Jaén	4.38	15.70
Ciudad Real	5.60	27.20
Cordova	6.40	21.00
Cadiz	14.50	31.70

The figures of the first column are obtained by dividing the total area of the provinces by the number of parcels registered ; those of the second by dividing the total area by the number of owners.

It will thus be seen that the province of Alicante representing a typical territory of the Mediterranean coast, exhibits the maximum of parcelling out and subdivision of property (seeing that for the provinces of the Cantabrian coast no land survey data are as yet available) ; the provinces of Madrid and Toledo, that of Albacete in part, those of Jaén and of Ciudad Real represent from our point of view, the distribution of property on the Castillian plains ; nevertheless, the last named, owing to its geographical position towards the Portuguese frontier, also represents the transition into the system of latifundia, which is more pronounced in the province of Cordova, and attains its maximum intensity in that of Cadiz.

The particulars set out hitherto are nevertheless insufficient to allow of forming a general idea of the parcelling out and accumulation of Spanish landed property. We may now see whether it is possible to collect any statistical data which will, even indirectly, render evident the distribution of this property with a sufficient degree of approximation for the purposes of the present study.

§ 4. Statistical data.

We have seen that it is not possible to use the evidence of the land survey register, which would be the only means of ascertaining exactly the distribution of Spanish soil. In order to attain our object as best we may, we shall avail ourselves of another source of information, already utilised by eminent economists and adopted in Spain by Señor Domingo Aller, in his work entitled « Large Landed Estates in Spain ». We refer to the incidence of taxation on the land, which may be made use of to classify the distribution of the land.

The following Table (N° 1) has been prepared on the basis of the data received every year by the General Direction of Taxes, exhibiting the figures of assessment to tax on rural property and cattle. Although both bases of taxation are incorporated in these data and it is not possible to differentiate the sums relating to each of them, as there exist no ancient privileges in favour of institutions engaging exclusively in cattle breeding, for instance, the *Consejo de la Mesta*, it may be considered that the number of assessments relating to breeding exclusively is exceedingly small. Almost all the tax payers of the Spanish countryside are assessed under both heads. Nevertheless, the error which might result from this will not impair the expediency of basing on these data a general principle which will serve as our point of departure. The data cited relate to the year 1906, (being the most complete in existence) ; we nevertheless consider that this drawback matters little, considering the object in view, which is to draw up an approximate table of distribution of territory.

TABLE I.

Amounts of assessments on rural property and cattle, according to class and region

Agricultural Regions (1)	Number of Assessments									Total Assessments	%		
	Up to 3 pts	from 3 to 20	from 20 to 50	from 50 to 100	from 100 to 200	from 200 to 300	from 500 to 1000	from 1000 to 5000	5000 and over		up to 20 pts	from 20 to 200	200 and over
1st Region: Galicia and Asturia (5 provinces) . .	193,359	364,328	158,986	38,288	10,352	2,394	349	100	1	768,557	62.62	27.01	0.37
2nd Region: Léon (5 provinces)	126,741	225,930	82,190	25,613	10,786	3,895	886	379	7	476,427	74.03	24.89	1.08
3rd Region: Aragon and Rioja (4 provinces) . .	101,413	184,147	603,29	23,245	10,643	4,700	994	381	8	385,860	74.00	24.42	1.58
4th Region: Catalonia (4 provinces)	70,244	170,894	51,123	17,746	10,070	6,477	1,307	289	1	328,151	73.48	24.06	2.46
5th Region: Old Castille (5 provinces)	119,964	193,954	63,675	21,457	8,640	3,776	784	298	7	412,505	76.09	22.73	1.18
6th Region: La Mancha and Estremadura (4 prov.)	75,953	127,554	37,855	13,965	7,867	5,720	2,095	1,400	77	272,486	74.68	21.90	3.42
7th Region: New Castille 9 provinces)	65,385	140,645	48,895	19,268	9,333	5,017	1,414	812	49	290,818	71.18	26.32	2.50
8th Region: Levante (4 provinces)	118,832	256,138	84,570	28,996	13,279	7,558	1,677	677	17	511,744	73.27	24.79	1.94
9th Region: Western Andalusia (4 provinces) .	40,633	89,633	31,644	13,676	7,938	6,110	2,666	2,272	207	194,779	66.88	27.34	5.78
10th Region: Eastern Andalusia (4 provinces) . .	70,454	145,467	48,722	17,197	9,825	6,182	1,850	976	95	300,768	71.79	25.18	3.03
Total . . .	982,978	1,899,040	667,989	219,451	98,733	51,829	14,022	7,584	469	3,942,095			

(1) We adopt the grouping of the Spanish provinces into regions, as used by Señor Aller in his work. as it best answers our purpose; indeed, the groups were formed in view of the analogies of the agrarian system of each province. The provinces of Biscay and Navarre are not included in these groups. as no data are obtainable regarding them; the same applies to the Balearic and Canary Island provinces.

The financial administration (Inland Revenue Office) in the Spanish provinces classes the assessments to rural and cattle tax in 15 categories ranging from those below 3 pesetas to those above 5 000. For the purposes of this study we have thought it well to classify them in 9 categories only, which are sufficiently characteristic.

In order to understand the data appearing in Table I, it is necessary to point out that the tax is assessed on the net taxable value of rural wealth and cattle at the rate of 20 %. Thus, if you wish to know the net income which must be presumed to be enjoyed by a tax payer in respect to the two objects taxed for each peseta to be paid by him in respect of the above tax, it will suffice to multiply by 5 the amount of his assessment.

We may note that the number of assessments is not equal to the number of tax payers ; the latter are far fewer than the former, some landowners being assessable in different municipal divisions lying in different provinces ; therefore the name of those in this category recurs in all the treasury divisions covering the cantons where their properties lie. It is extremely difficult to ascertain exactly the difference between the number of assessments and the number of tax payers, as detailed particulars are wanting. Señor Aller, in the above work, in order to obtain a figure corresponding as exactly as possible to the actual number of tax payers, divided by 3 the number of assessments below 1000 pesetas, and then added the quotient to the number of assessments above 1000 pesetas, being of opinion that the result may be regarded as the probable number of tax payers (1). We accept this method, thinking that it is not excessive to attribute on the average to each tax payer three assessments below 1000 pesetas. This does not mean that the accumulated assessments are in the same category ; there are indeed tax payers comprised in many of them, others in two or more, according to the extent of their landed property in each municipal division. It is therefore impossible to submit to any calculation, even approximate, the variety of these combinations, which is extremely great.

Taking as our basis the foregoing calculation, we may go on to make other calculations relating to the aggregation of landed property. For this purpose we have inserted in Table I the last 3 columns, considering as large, medium and small landed proprietors, those possessed of an estate the net annual proceeds of which respectively exceed 3000 pesetas, range from 300 to 3000, or do not exceed 300 ; or (which amounts to the same thing, the ratio being 3 to 1 between the assessments and the tax payers) we shall consider as large landowners those who pay assessments at 200 pesetas, as medium landowners those taxed from 20 to 200 pesetas, and as small landowners those paying a tax up to 20 pesetas. The figure 3000 as the

(1) This operation may be represented graphically as follows :

$D = \frac{x}{3} + y$ in which x is the number of assessments below 1000 pesetas (3,934,042), y the number of assessments from 1000 pesetas upward (8053) and D the probable number of tax payers (1,319,400).

starting point for the net annual proceeds of the large estates must not be considered too small if regard be had to the average of wealth of Spanish landed proprietors and to the concealment of rural wealth by tax payers, which, according to the particulars of Señor Torres Muñoz (1) may be estimated at one fourth at least above the declared value; from which it follows that an estate with a declared income say of 3000 pesetas, really yields at least 4000.

In order to get as close as possible to actual facts, in relation to the distribution of Spanish rural property, and to be able afterwards to examine the effects resulting from them, it is desirable to supplement the particulars obtained by the aid ot the general classification of taxation by some others which relate to the agricultural population and the productive area. For this reason we have prepared Table II, which requires no explanation.

(1) See Torres Muñoz, Catastro general parcelario. Madrid, 1903.

TABLE II. — *Ratio between the productive area and the number of landed properties and between the agricultural population and the probable number of rural tax-payers.*

Regions	*a)* Productive area belonging to private persons ha.	*b)* Number of rural properties	*c)* Number of inhabitants doing agricultural work	*d)* Probable tax-payers	$(a:b)$ Average in hectares of productive area per estate	$(b:d)$ Average of properties per tax-payers	$\left(d:\frac{c}{100}\right)$ Tax-payers (landowners) per 100 rural inhabitants.
1st region: Galicia and Asturias (5 provinces)	2,987,669	4,996,279	1,155,000	255,826	0.60	20	22.15
2nd » Leon (5 provinces)	3,641,951	3,054,821	528,200	159,178	1.19	19	30.14
3rd » Aragon and Rioja (4 provinces)	2,768,221	2,179,052	305,800	129,009	1.27	17	42.19
4th » Catalonia (5 provinces) . . .	2,240,307	944,008	426,700	109,707	2.37	9	25.71
5th » Old Castille (5 provinces) . .	3,444,390	3,659,438	244,600	146,381	0.94	25	59.84
6th » La Mancha and Estremadura vinces)	6,474,516	1,176,273	421,500	92,305	5.50	13	21.90
7th » New Castille (4 provinces) . .	4,088,011	1,666,182	336,700	98,127	2.45	17	29.14
8th » Levante (4 provinces) . . .	2,538,644	1,582,684	567,600	171,307	1.60	9	30.18
9th » Western Andalusia (4 provinces	3,905,704	562,933	402,900	67,405	6.94	8	16.73
10th » Eastern Andalusia (4 provinces	3,010,726	1,132,564	509,800	101,478	2.66	11	19.91
Total . . .	35,100,139	20,954,234	4,898,800	1,330,723	1.68	16	27.16

Thanks to these particulars, the reader will perhaps be able to form an approximate idea of the distribution of landed property in Spain. We may further note however, that large estates are not in the hands of private persons alone, for the State, municipalities and other rural bodies possess a part of the Spanish soil the collective ownership of which is generally designated by their name of lands (montes) of public utility. It will therefore not be out of place to furnish in this connection some particulars in relation to these properties (Table III).

TABLE III. — *Number and areas of the lands (montes) of public utility.*

Regions	Lands of the public utility belonging				Area in hectares	
	to the State	to villages	to public establishments	Total number of lands	of largest	of smallest
1st région: Galicia and Asturias (5 provinces) . . .	17	1,515	—	1,532	10,000	1
2nd » Leon (5 provinces). .	3	1,927	1	1,931	8,500	1
3rd » Aragon and Rioja (4 provinces).	3	1,142	—	1,145	10,048	10
4th » Catalonia (5 provinces)	27	292	1	320	9,672	10
5th » Old Castille (5 provinces)	—	1,142	1	1,143	12,268	3
6th » La Mancha and Estremadura (4 prov.) . .	17	179	—	196	22,000	12
7th » New Castille (4 provinces)	30	570	7	607	14,108	2
8th » Levante (4 provinces)	502	260	—	762	10,048	6
9th » Western Andalusia (4 provinces)	2	109	—	111	9,326	8
10th » Eastern Andalusia (4 provinces).	71	279	—	350	23,000	10
Total . . .	672	7,415	10	8,097		

On examining the totality of the statistical data contained in the foregoing table, many inferences may be drawn. Thus, we see that in all the regions, including those where territory is most subdivided, there exist in a lesser or greater proportion, landed properties or estates declaring a net annual taxable income of 5000 pesetas, which in Spain is a fairly considerable revenue. At the same time it is observed that in some regions part of the land is cut up into mere patches, that is, has been parcelled out to an excessive degree, as is proved by the average of 0.60 hectares represent-

ing the area of landed properties in Galicia and the Austurias, although the State makes, in the same region, nearly 3000 assessments in excess of 200 pesetas, which presupposes a like number of properties of a far smaller area.

Furthermore, on comparing the 10 regions into which we have divided the territory of the Peninsula — not counting the provinces of Biscay and Navarre — many differences are found between them with regard to the accumulation of landed property. In Galicia and the Asturias, which have an agricultural population of 1,155,000 inhabitants, the State only makes 349 assessments of 500 to 1000 pesetas, while in Eastern Andalusia, where the agricultural population is only 402,900 inhabitants, there are 2,666 assessments of the same category.

In this same Andalusian region, the productive surface of which is almost equal to that of Galicia and the Asturias combined, there are only 40,633 assessments below 3 pesetas, while in Galicia and the Asturias this category comprises 193,359.

If we divide by 4 the number of inhabitants engaged in agricultural occupations, we obtain the probable number of agricultural families in each region. On comparing this figure with the number of hectares of productive area, we shall find that on the average, while in Galicia and the Asturias barely 2 hectares of land fall to each family, in Western Andalusia each family has 40 hectares.

To sum up, all these data, and the manifold conclusions which may be drawn from them, demonstrate that rural property in its three aspects (large, medium and small) is very unequally distributed in the different regions of Spain.

(To be continued).

FRANCE.

THE CONSOLIDATION OF FARM-LANDS.

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As France is essentially a country of small holdings one would have expected that the problems connected with the consolidation or restriping of lands would be much to the fore. Yet it would seem that hitherto public opinion has not attached as much importance to this matter in France as in neighbouring countries. Thus we find that when in 1891 the extra-parliamentary Commission on the Land-Register sent out an enquiry to the several departments to ascertain whether public opinion would favour the restriping of lands and the building of country roads, and whether such measures would be of real value to the districts, the answers were not, as a rule, encouraging. The reliability and value of this enquiry has, indeed, been questioned : nevertheless the reporter, Emile Cheysson, who was himself unfavourable to the proposals, confessed in his report that the utility of the proposed measures and the need for the formation of syndicates to facilitate their execution, was admitted in about one third of the departments. More recently, in 1908, the Ministry of Agriculture made an enquiry into the con-

ditions of small holdings in France, and the replies to the questions which it sent out on this subject show similar results.

However this may be, the need for the consolidation of lands has remained a local problem, limited hitherto to Lorraine where it arose in the eighteenth century (1). It should therefore be studied in that Province, where a prize-essay competition on the subject was organised at Nancy in 1911 by the Stanislas Academy. Thanks to the assistance of the Musée Social the winner of the competition, Mr. Georges Hottenger, has been enabled to give to the public the very remarkable study which he made on that occasion. We cannot do better than to recapitulate the facts which he has set forth.

§ 1. The guiding principles for the restriping of lands in Lorraine.

The first instance of the restriping of lands in Lorraine was carried out in 1770 at Neuvillers-sur-Moselle, as a result of the initiative taken by the land-surveyor, Chaumont de la Glazière. The plan of this work, still on view in the town-hall of that commune, shows that it was a model of its kind ; roads for facilitating the working of the estate, planted with fruit trees, laid out in accordance with a methodical plan, intersected the area, and made a living organism of the whole.

Unfortunately, this estate remained an isolated example until the middle of the next century, when, in 1859, the land-surveyor Mr. Gorce, to whom was entrusted the task of revising the Land-Register of Altroff (former Department of the Meurthe) came to an agreement with the owners of land in that commune by which this work was made to coincide with a general delimitation of boundaries. As Mr. Hottenger remarks, nearly all the work entailed by these two processes is common to both, as, for instance, the rectification of boundaries, triangulation, making the drawings, preparing detailed plans, calculating superficial contents, etc. So close is the connection between both kinds of work that it is surprising that land-owners did not, from the start, request that the work which the administration was carrying out under their eyes should be made to serve their interests by providing them with an accurate delimitation of their estates. However this may be, the idea of combining the process of the restriping of lands with that of the revision of the Land-Register was henceforth seen to be the means for securing full practical benefits from such work, ensuring at the same time a sound basis for taxation and perfect security in the enjoyment of landed property.

The co-operation of the administration in this work of restriping is not only of practical value ; it also exercises a moral influence. In the eyes of the population it confers on it official importance. The executant is a government official ; as such he has authority ; if to this he adds tact and ability

(1) Mr. Hottenger only mentions one instance of restriping outside the region of the East at Saint Soupplet (Seine-et-Marne) one at Beire-le-Chatel (Côte d'Or), and some recently carried out or still in process of execution in the Department of the Somme.

he is in a position to overcome the many difficulties which such work hardly ever fails to encounter and which would defeat a professional man backed by no other authority than that of the more or less numerous group of persons which selected him.

The general delimitation of boundaries, combined with the revision of the Land-Register, is the fundamental idea underlying the system introduced by Mr. Gorce. But this is not all: from the start Mr. Gorce completed the work by the construction of roads for facilitating the working of the lands, by straightening out crooked lots, and more rarely by the rectification of water-courses.

Of these improvements the most important and the most valuable is the consolidation of lots by means of exchanges ; at the same time the very psychology of the peasantry makes this the most delicate task. Mr. Gorce undertook to make it acceptable to the parties concerned, but without attempting to force them and proposing it only as an accessory feature to other works. He realised that if he placed it in the front rank the inhabitants would dread the upsetting of their holdings, and the success of the whole undertaking would be compromised.

A final detail which completes the system is the following : the initiative in such undertakings must never be taken by the public authorities, by the Government, the Department, or the Communes ; it must always emanate from the parties concerned, from a body of land-owners.

Mr. Gorce supplemented these fundamental rules by two practical rules of procedure which ensured the soundness of the work and its efficacy. In the first place he restricted the area of the localities under consideration and multiplied their number, and within the boundaries thus fixed he rectified the lots. By this means he avoided the danger of completely changing the locality of the rectified lots, as had happened in a neighbouring department, where the surveyor in charge, as the result of a series of displacements, has assigned to land-owners consolidated holdings on soil of a quite different character to that which they originally possessed : as for instance, in the case of the owner of a vineyard to whom a sand-pit was assigned.

In the second place, on the new plan showing the consolidated lots reduced to a rectangular shape, Mr. Gorce took care to note their dimensions so carefully that each land-owner can always avail himself of a survey of the lots belonging to him and no dispute as to boundaries or superficial content can arise. As each locality dealt with covers a restricted area with carefully marked boundaries, it is easy to calculate its superficial content and to verify the area of each of the lots into which it is divided. As a result, boundary disputes and law-suits arising therefrom have completely disappeared wherever the restriping of lands has been carried out, whereas previously they used to be of constant occurrence.

The restriping of lands on this plan was introduced by Mr. Gorce in 1860 and 1863 in two communes of the former Department of the Meurthe, Altroff and Lening, and since then operations of the same kind, carried out in accordance with the same methods, have been transacted in ever increasing numbers in the Department, as can be seen by examining the following table drawn up by Mr. Hottenger.

Communes of the Department of Meurthe-et-Moselle restriped on Jan. 1, 1914.

Date on which the work was completed	Name of Communes	Total No. of Hect.	No. of Lots	Length of Roads built	Lots suppressed
1863	Altroff	1,326	5,570	8.0	—
1868	Léning	647	2,713	11.5	—
1870	Bermering	570	3,065	12.0	—
1871	Omelmont	468	2,608	6.5	—
1874	Clérey	441	1,790	10.0	—
1877	Tonnoy	1,235	5,730	17.5	—
1877	Haucourt	738	1,608	6.2	—
1878	Saint-Firmin	666	4,225	15.0	—
1878	Boismont	543	1,888	—	—
1880	Benney	1,848	7,894	33.0	—
1880	Praye	872	4,284	25.0	—
1881	Azelot	475	1,986	12.0	—
1881	Burthecourt	559	1,691	8.5	—
1883	Réméreville	1,346	4,163	24.5	—
1884	Courcelles	431	2,706	7.6	—
1886	Sommerviller	396	3,587	13.5	—
1886	Xirocourt	1,132	6,275	29.5	—
1888	Jevoncourt	329	1,934	12.5	—
1888	Affracourt	552	2,960	19.0	—
1889	Lemainville	474	2,968	7.0	—
1889	Tantonville	796	2,914	17.5	—
1890	Buissoncourt	689	1,692	8.5	—
1891	Virecourt	500	1,491	11.0	—
1891	Vaudeville	903	4,284	—	—
1891	Haussonville	1,117	4,655	26.0	—
1892	Brin-sur-Amane	1,160	2,670	11.0	—
1894	Villacourt	1,371	6,263	29.0	—
1896	Velaine-sur-Amance	648	3,566	—	—
1897	Saint-Germain	768	2,724	16.0	—
1897	Saint-Remimont	651	4,563	11.0	200
1898	Barbonville	1,081	4,412	13.5	60
1898	Hoéville	853	4,098	20.0	—
1899	Cercueil	817	2,669	19.0	—

(Continued). *Communes of the Department of Meurthe-et-Moselle restriped on Jan.* 1, 1914.

Date on which the work was completed	Name of Communes	Total No. of Hect.	No. of Lots	Length of roads built	Lots suppressed
1899	Coyviller	453	1,792	10.0	350
1900	Chaouilley	512	2,565	9.0	—
1901	Damelevières	811	1,855	7.6	50
1901	Essey-les-Nancy	565	4,000	9.4	—
1903	Bettainvillers	456	1,277	—	—
1907	Dembasle	1,148	7,901	42.0	—
1907	Thézey-Saint-Martin	794	3,983	19.0	200
1909	Vroncourt	416	1.250	10.0	120
1909	Belleau	475	2,395	18.1	305
1910	Armaucourt	372	1,495	10.1	50
1910	Velle-sur-Moselle	441	1,764	12.0	100
1912	Méhoncourt	786	2,449	24.6	79
1912	Laneuvelotte	913	1,669	23.7	214
1912	Ferrlères	616	2,042	16.0	100
1913	Flainval	361	1,780	25,0	235
1913	Pulnoy	237	984	8.0	526
1913	Bey-sur-Seille	370	1,689	15.4	250

§ 2. Juridical organisation.

Mr. Hottenger points out that while the operations in connection with this work still have the same character and are carried out in accordance with the same methods of procedure as at the start, there is nevertheless one point with regard to which important changes have been made during this period, namely the legal form to be given to the collective body which takes the initiative in favour of restriping, and the powers it possesses in its dealings with the minority, in short, the nature of the authority competent to undertake such work.

When he first began to apply his system Mr. Gorce found himself face to face with difficulties which have since become, so to speak, classic. On the one hand, the opposition of a minority; on the other, the irresolution and shilly-shallying which occurs among the original partisans. How then

can adequate cohesion and authority be conferred on the association formed to carry out the restriping, so as to enable it to overcome all resistence and render vain all defections?

As far back as 1876 the Central Agricultural Society of Meurthe-et-Moselle came to the following conclusions which it summarised in a resolution addressed to the public authorities. The association, it said, needs to be reorganised as a corporate body so that it may borrow the money required for carrying out the work, so as to have the right to appear in court, and to enjoy the faculty conferred on it by law of obtaining the consent of legally incompetent persons or of their representatives, and so as to recover from the parties concerned their share of the expenses. Now, unless the association be recognised as an association of public utility, there is only one legal means for securing its incorporation, and that is to organise it as a syndicate under the provisions of the Act of June 21st, 1865. But of all the work which the association is formed to carry out this Act only mentions the construction of roads to facilitate the working of the land ; its provisions should therefore be extended to cover the work of land-surveying and boundary laying, known as the rectification of boundaries, restriping, or consolidation of holdings and general delimitation of boundaries. Compulsory powers can be granted to the association only when it includes in its labours (as is generally the case) the task of bring the Land-Register up to date. Besides the safeguard assured by the large majority of land-owners which the Act requires should be members before authorising the formation of an association in a given locality (two thirds in numbers and one half of the area, or half in numbers and two thirds of the area) the rights of the minority would then have the additional protection of administrative authorisation.

In practice, syndicates for the purpose of the restriping of lands were already being formed, spite of their doubtful legality, under the provisions of the Act of 1865, and strange to say, owing undoubtedly to the tact of the person in charge and of his assistants, these syndicates which, owing to the fact that they were engaged in road-building, had legal recognition and could have secured authorisation, never needed to have recourse to same. Several hundred kilometers of roads were built in the communes which were then restriped, without let or hindrance, and with no compulsory powers beyond those conferred in connection with the work of collective delimitation of boundaries, which is regulated by law.

At last, by a decree dated 29th January, 1891, the Council of State decided that a syndicate — that of Baudiguécourt (Meuse), — could enlarge its scope so as to include the laying of boundaries, rectification of bounds and the opening of roads to facilitate the working of the land, all of which the land-owners of the commune, with the exception of one, called for. Since then the legal status of syndicates formed for the purpose of the restriping of lands has never been disputed. At the present time there can be no doubt on the subject, for the decree of 18th June 1909 recognised the public utility of the works proposed by the Commune of Méhoncourt, and provided for all the different transactions involved in the restriping of lands.

The legal status of an authorised syndical association makes it strong enough to withstand all defections, to counteract all cabals, and to defeat all resistence, and the example of Méhoncourt, quoted by Mr. Hottenger, gives proof of this, while at the same time showing the practical difficulties which such work may encounter and the beneficial results which it can yield.

At Méhoncourt, over nine tenths of the land-owners (154 out of 166) had given their signatures to the proposal from the start. But as the dissidents included several large land-owners it became necessary to have recourse without delay to the formalities required for the formation of an authorised association. This authorisation was granted by a decree of the prefect on August 17th, 1909, in accordance with the Act above referred to of 18th June, 1909. In the meantime the dissidents had bestirred themselves, and were resolved to defeat the proposal, and when the association, duly authorised, was in a position to proceed with the requisite formalities, they went so far as to get the promotors of the scheme dismissed from the commission and to get a man elected as president who had been won over to their side and was ready to carry out their suggestions.

But their success was sterile. It was impossible to go back on the decision to carry out the proposed work. In accordance with the provisions of the Act (art. 10) " the plans, prospectus, and estimates of the work and the proposals of the association " had been subjected to an administrative inquiry during which the opponents had taken good care not to bring forward their arguments. The Council of State had formed its decision in accordance with the results of this inquiry. There was nothing more to be done but to carry out the plans, and the opponents could only avail themselves of the force of inertia. They made use of it, and twice the surveyor had to interrupt his work for lack of information. Nevertheless, the undertaking was brought to a successful conclusion.

The next step was the pulling up of stakes and pickets. In several places where it had not been deemed necessary to metal roads which had been traced and their boundaries marked, the land-owners on either side sowed seed on them. But this, like other efforts, only led to delays and to some extra expense. The Service of Agricultural Improvements, which had taken this work in hand from the start, was on the look out, and in carrying it through to a successful conclusion it displayed zeal equal to that shown by the opponents in their efforts to make the scheme fail. In dealing with individual land-owners the syndicate had on its side the compulsory powers conferred on it for the work specified in the administrative authorisation, while the syndicate itself was threatened with the enforcement of articles 25 of the Act of July 21st, 1865, and 55 of the decree of 9th March 1894, which empower the Prefect, in case of abstention or opposition on the part of the syndicate, to have the proposed work carried out under his own direction should he judge it to be in the public interest. The undertaking was, therefore, bound to succeed.

The work of restriping was carried out over an area of 580 hectares, consisting of 1,727 lots of which about 1,400 were enclosed within others. Of these 1,400 lots, over one thousand secured free access thanks to the roads

which were built. Fifty-two such new roads were constructed, from 3 to 7 metres broad, and for a total length of 19 kilometers 691 metres. The land needed for these roads, in all 9 ½ hectares, was taken from the total area without any loss to the land-owners ; for, as often happens, the new survey showed an excess of area which sufficed to ensure ample compensation for the deficit caused by the construction of the new roads. The existing roads were repaired, widened, rectified, and bounded; but whereas they only measured 4 km. 952 in length the Commune now possesses a system of 24 km. 653 metres. Lastly 597 mile-stones were erected to mark the boundaries of these roads, and 804 have been placed round the localities in question.

The cost of the work deserves special mention. Formerly, bsfore the Service of Agricultural Improvements took over the management of the work and made the necessary studies (1907), the average cost to the land-owners amounted to from 20 to 25 france per hectare. The owner of a 100 hectare farm thus saw his income from the land reduced by 2,000 to 2,500 francs, and, unfortunately, this was often enough to make him a resolute opponent of restriping. At present, even taking into account the expenses entailed by the formation of an authorised association, and even when there is a heavy outlay on new roads, the cost to the land-owners does not exceed an average of 10 to 15 francs per hectare, or from 8 to 10 frcs. when there are no roads to be built, and from 12 to 15 francs inclusive of road-building. The cost has fallen as low as 9 fr. 50 at Ville-sur-Moselle in 1910.

The following is Mr. Hottenger's estimate of the cost of works on an area of 800 hectares divided into 3,350 lots.

I. — *Cost of work of restriping.*

(a) *Preliminary studies.*

Preparation of the " dossier " and steps for the formation of an authorised association, if necessary	Fr.	500.00
Restriping of 800 hectares at 10 fr. per hectare . . .		8,000.00
Restriping of 3,350 lots at 1 fr. per hectare		3,350.00
Roads : 12 kilometres at 20 fr. per km.		240.00
Superintending the setting-up of 2,000 mile-stones at fr. 0.25 each		500.00
Notices to land-owners and abstract of titles : 3,350 lots at fr. 0.25		837.50
Sundry and unforeseen expenses		272.50
Total . . .		13,200.00

(b) *Working expenses.*

Posts (for land-marks, purchase, carriage, erection), 2,000 at fr. 2.25	Fr.	4,500.00
Stakes and pickets		300.00
Cost of labour		1,600.00
Abstracts of titles and secretarial work		600.00
Collection of dues		200.00
Making the roads fit for traffic		3,200.00
Total		10,400.00

II. — *Cost of bringing the Land-Register up to date.*

Fixed compensation to the Controller	Fr.	40.00
Fixed compensation to the Inspector		40.00
800 hectares at fr. 2,615		2,092.00
80 lots under buildings at fr. 0.18.		14.40
3,400 lots numbered at fr. 1.79.		6,086.00
170 lots not numbered (1) at fr. 1,49		253.30
26 sheets of the Land-Register plan (2) at 11.00		286.00
Total		8,811.80

At Méhoncourt, as in several other communes, the Service of Agricultural Improvements has undertaken to carry out at its own expense all the studies necessary for the work of restriping, exclusive only of the cost of execution and of revising the Land-Register. More than this, in accordance with a rule, in force during the past few years, the General Council of Meurthe-et-Moselle has made itself responsible for 30 per cent. of the cost of revising the Land-Register, and, on its side, the Agricultural Committee of Lunéville, has made a grant of 400 francs to those communes of the district (arrondissement) which undertake the restriping of their lands. In short, the expenditure to be met by the land-owners concerned does not exceed 12 francs per hectare. Now, although it is not possible to make quite accurate calculations, it is reckoned that the facilitations secured and the disputes avoided by restriping increase the value of the lands from 20 to 30 per cent. at least.

(1) That is to say not included in the revision and reinscribed on the new plan just as they figured on the old plan (woods, vineyards, village gardens).

(2) One sheet for every 30 to 35 hectares.

The difficulties encountered in the restriping of Méhoncourt are due, on the one hand, to the fact that the lots composing the estates are so scattered and to the large number of land-owners, and, on the other hand, to the lack of assistance, and even to the hostility of some large proprietors. A more recent case of restriping carried out at Pulnoy (6 kilometres from Nancy), likewise described by Mr. Hottenger, affords to some extent the proof of these remarks. There the small land-owners were of little account, and the large land-owners came to a mutual understanding on the strength of which they not only exchanged adjoining lands, but even distant lots situated in different localities ; the results thus obtained deserve to be noted.

The territory of Pulnoy is not extensive : 373 hectares 85 ares. The woods, the village and the gardens, together with a small area which had already been restriped in 1883, were excluded from the operation, and the process of restriping only applied to 273 hectares owned by 55 land-owners, and divided into 984 lots. The number of lots has been reduced to 458, a reduction of 58.25 per cent. At the same time 19 roads have been planned for a length of 8.873 kilometres, which have made it possible to give free access to most of the lots. The consequent increased facility for working the lands, together with the advantages derived from the formation of large consolidated holdings and their division into enclosed lands and natural meadows, cannot fail to confer on the territory of Pulnoy a considerable increase in value. Moreover, the expenditure which had to be borne by the land-owners did not exceed 10 francs per hectare. The cost amounted to about 4,300 francs, of which 1,100 francs were spent on delimiting boundaries, 2,000 francs on roads, and 1,200 francs on general expenses. If we deduct from this sum the grant made by the Service of Agricultural Improvements, amounting to 700 francs, and the grant made by the commune of Pulnoy of 880 francs, 2,800 francs remain to be paid by the land-owners.

It must, however, be noted that of the 237 hectares and of the 984 lots which were restriped, 216.69 hectares and 862 lots belonged to three large land-owners. It was their initiative and agreement which made it possible to carry out the process of consolidation which, in several cantons, amounted to a redivision of the soil. The results might have been yet more satisfactory, and have resulted everywhere in a 64 per cent reduction of cost, had it not been for the unintelligent opposition of a few small land-owners.

Mr. Hottenger does not hesitate to say that wherever a notable proportion of the land belongs to large proprietors, the success of restriping operations depends on them. It is their business to understand the part they should play and their real interests which are always far superior to the expense they will incur. He also comes to the conclusion that in view of the ideas and customs which unfortunately still too often prevail in country districts, the opposition and often the obstruction of a more or less considerable minority of small land-owners is inevitable, but the syndical association, organised in conformity with the Act of June 21st, 1865 and with the decree of March 9th, 1894, integrating it, are the legal instruments which ensure the triumph of the best interests of the community. It is true that, with the exception of the construction of roads to facilitate the

working of lands, none of the work of consolidation is expressly provided for by this act, but a process of interpretation and of precedent has taken place which has bent the text of the law to meet practical requirements, has extended its application, and read into it more than it was perhaps at first intended to imply. The work of the restriping of lands in France would seem to be one of those measures which arise from usage, and from the pressure of current needs, without the help of law, and which in taking root and gathering strength adapt themselves to some of the legal modes of procedure already in existence.

Appendix.

Bye-laws of the Voluntary Syndical Association for the restriping of lands and the construction of country roads to facilitate their working, in the Commune of Froville (Meurthe-et-Moselle).

Art. 1. — We, the undersigned, all being land-owners in the territory of the commune of Froville, canton of Bayon, Department of Meurthe-et-Moselle, give notice that we form ourselves into a voluntary syndical association, to which we pledge the lands which belong to us.

The association will be constituted as soon as two thirds of the land-owners, possessing at least three quarters of the area to be restriped, or three fourths of the land-owners possessing at least two thirds of the area to be restriped, have joined the association.

Art. 2. — The association is subject to all the rules and conditions enacted by the laws of June 21st 1865, and 22nd December 1888, and by the rules for public administrations of March 9th, 1894, notably by art. 2 of said rules, which provides that the obligations arising from the formation of a syndicate are a lien on the real estate of its members, and attach thereto irrespective of the hands into which said lands may pass, until such time as the association is wound up. Moreover, the association is subject to the special and particular provisions specified in the following articles.

Art. 3. — The headquarters of the association are established in the town-hall of Froville.

Art. 4. — The purpose of the association is :

(*a*) the restriping of the territory and a general delimitation of boundaries :

(*b*) the rectification of crooked and irregular lots and of small water-courses ;

(*c*) the construction and up-keep of country roads for the working of the lands and of other agricultural improvements in the collective interest.

Art. 5. — The cost of all the work which the present association is formed to carry out will be divided up between all the land-owners, proportionately to the superficial content of the restriped lands belonging to each of them.

The members, moreover, agree to pay, to meet initial outlay on stakes, posts for land-marks, labour, etc., the sum of 1 franc for each 20 ares of ground or fraction of that area which they possess. This sum is to be paid over at the request of the director of the syndicate, and may be called up within the first two months following the organisation of the association.

Art. 6. — As soon as the conditions required by article 1 of these bye-laws are fulfilled, a constituent general meeting of the association will be held. Each land-owner will have the right to take part in this general meeting.

Each land-owner will be entitled to one vote whatever be the superficial content of the lands he owns.

Land-owners unable to be present at this meeting may be represented by power of attorney. The same person may only hold such powers of attorney for five members. A Board of Syndics entrusted with the management of the association will be elected by a strict majority of the members present or represented.

The number of syndics to be elected by the general meeting is fixed at ten.

The term of office of the syndics is unlimited.

Art. 7. — As soon as it is appointed, the Board of Syndics shall meet to appoint a director, an assistant director, and a secretary-treasurer ; this latter may be selected outside the membership of the board and of the association.

The deliberations of the board are entered in a special register.

Art. 8. — The association will be represented at law by the director of the Board of Syndics. He will have the right to exercise on behalf of the association its rights both positive and latent ; for instance, the undersigned confer authority on the director to summon and sue at law before any court in disputes arising out of the laying of boundaries, those land-owners who are not members of this association and who may refuse to participate in the work it prescribes.

Art. 9. — The decisions of the Board of Syndics are valid when five members are present. Decisions are taken by a majority vote. In case of a draw the director has the casting vote.

Art. 10. — The undersigned also confer on the Board of Syndics full authority to direct and bring to a successful conclusion the work in view of which the association has been formed ; i. e.

(*a*) to seek and ascertain with the assistance of the engineer in the employ of the Service of Agricultural Improvements, or his representative, the present owners of the lands ;

(*b*) to search the land titles and to draw up an abstract of same to be handed to the engineer or his representative ;

(*c*) to decide on all difficulties unforeseen by the present bye-laws, bearing on their execution, and generally to carry on the work of administration of the association ;

(*d*) to decide on the number, ubication, and breadth of the country

and working roads which are to be rectified or built and to decide on such redistribution of lots as may be required for the success of the work ;

(*e*) The Board of Syndics will decide in which cantons or localities the irregular boundaries of certain lots should be exceptionally preserved, the principle being that rectification is to be carried out wherever it is possible ;

(*f*) The Board of Syndics, after consulting the land-owners, will decide on consolidating or exchanging lots, and other changes of general utility likely to facilitate the farming of the lands.

It will decide whether certain sections such as woods, vineyards, gardens, enclosed lands, etc. should be included in the work of restriping. The boundaries of such sections as may be excepted will be determined in accordance with actual possession.

It will also decide whether the boundaries previously layed are to be maintained.

When the decision is in the affirmative this must be accurately noted on the general plan for restriping and such boundaries must be brought into keeping with the general plan adopted for the consolidation of the lots.

Art. 11. — The undersigned land-owners agree when requested by letter, to produce their title-deeds on the day, hour, and at the place appointed by the Board of Syndics.

Prolonged and intentional delay on the part of any member in producing his title-deeds will render him liable, if he fail to comply with a demand made in due form of law, to be sued under the boundary acts before the judge of the peace, at his own exclusive cost.

The undersigned also undertake :

(*a*) to supply all information likely to facilitate the determination of the actual superficial content of their lands when the title-deeds to same have been mislaid.

(*b*) to justify, by the production of old title-deeds, the superficial content of those lands on which the syndicate may formulate doubts ;

(*c*) To attend personally, or to send a delegate to their lands as often as this may be needed to point out the boundaries, either to the engineer of the Service of Agricultural Improvements, or to his representative.

In the case of lands for which no title-deed can be produced, the syndicate will determine their superficial content either in accordance with the old land-register, or in accordance with actual possession.

Art. 12. — When the syndicate shall have fixed the basis for the division, the engineer of the Service of Agricultural Improvements or his representative, shall draw up, canton by canton, a statement of the superficial contents which he shall submit to the syndicate. This statement will be compared to that resulting from the abstracts of the titles. Should there be a deficit in certain cantons it will be made good out of any surplus which may exist in neighbouring cantons. Should the neighbouring cantons provide no such surplus the deficit will be deducted proportionately from the superficial content of each.

Any surplus which may not be required to make good a deficit in other cantons. will be similarly disposed of.

As soon as the new boundaries resulting from the proportionate distribution above referred to, have been laid, the land-owners will be invited to verify the land-marks ; if during the eight days following the notice of such verification no complaint has been made the delimitation of boundaries will be considered final.

No subsequent claims will be taken into consideration, unless they are based on material error.

The land-owners concerned can, at will, place posts as land-marks at the common expense along the boundary lines indicated. Anyhow, the Syndicate itself will undertake to place strong land-marks cut in hard stone, marking the boundaries of the cantons or localities in question and of the roads.

A space of not more than 1000 metres must intervene between the land-marks which delimit the boundaries of several lots.

Art. 13. — The owners shall enter into possession of their new holdings as follows :

During the fallow season, immediately after the placing of the land-marks.

When the boundaries have not been laid by the 1st of May, lands under peas, vetches, lentils, or potatoes must be left free by the 1st of October. During other seasons the owners shall enter into possession after the crops have been removed. In the case of artificial meadows, the new owner shall enter into possession after the first cut of hay has been made, which is the only one reserved to the former owner.

Trees, hedges, and bushes must be removed by the former proprietor within eleven months after the pickets have been driven in. At the expiration of this time the new owners can dispose of them.

Art. 14. — The Syndicate will sit as a court of first appeal on all disputes which may arise between the undersigned, or which may be raised by one of them. Its decisions can only be appealed against to the court of the district (arrondissement) and within the two months following on the award.

Art. 15. — As the restriping of the lands is carried out concurrently with the renewal of the land-register, the results of the work are entered on the plan and on the several documents annexed to the Land-Register deposited at the town-hall. A notice indicating the ubication, nature, superficial content and width of each lot will be handed to each land-owner for the lands belonging to him.

The undersigned undertake to recognise the plan and the statement for each section, deposited in the archives of the town-hall, and conformable to notices handed to them, as the only valid evidence bearing on the superficial content of their lots.

All transfer of land by sale, division, donation, etc., which may be made by the undersigned, either by private or by authenticated deed, must make mention of the superficial content together with the number of the plan and of the section.

RUGGERI ALFREDO, gerente responsabile.

INTERNATIONAL INSTITUTE OF AGRICULTURE
BUREAU OF ECONOMIC AND SOCIAL INTELLIGENCE

INTERNATIONAL REVIEW OF AGRICULTURAL ECONOMICS

(MONTHLY BULLETIN OF ECONOMIC AND SOCIAL INTELLIGENCE)

VOLUME LXV.
7TH. YEAR: NUMBER 6
JUNE, 1916.

ROME
PRINTING OFFICE OF THE INSTITUTE
1916

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Part I: Co-operation and Association

DENMARK.

COOPERATIVE ABATTOIRS IN DENMARK. (*Continued*).

§ 3. Working conditions of cooperative abattoirs.

We shall not refer to the technical organisation of the abattoirs or the systems of manufacture of the products save in so far as is necessary to explain the economic conditions of working.

The Cooperative Danish Abattoirs are of rather recent formation, well equipped and, from a technical point of view, able to sustain comparison with the best of such undertakings abroad. They are therefore in a position to furnish products of good quality and to utilise in the fullest way the bye-products of manufacture, thus reducing the general costs of production.

The technical conditions however are of minor importance as regards the quality of the goods, the latter depending substantially on the quality of the pigs. In point of fact the abattoirs of Canada and the United States are superior to Danish ones in technical results; their products however are less abundant because the pigs, both in the breed and fattening, are inferior to the Danish. It is precisely from this point of view that the Cooperative Danish Slaughter houses have, directly and indirectly, rendered the greatest service. Directly, each of them has encouraged the improvement of the breed within the boundaries of the territory over which its action extends, by granting subsidies to the breeding centres recognised by the State, placing breeding boars at the disposal of members and granting prizes at pig shows. The Cooperative Societies, with the same object, had continual experiments carried out in the feeding of pigs and trials of slaughter with different breeds, first in the experimental laboratory of the Higher School

of Agriculture and afterwards on a more extensive scale at special experimental stations opened and maintained by Cooperative Danish Abattoirs as a whole.

The State has likewise not failed to give its support to this work by means of contributions to the pig breeding centres.

Indirectly, considering the meat on the basis of quality, the slaughter houses have encouraged farmers to improve the breed, to sell the pigs at the right moment, to build good pig styes and to give attention to the feeding of the pigs, these latter measures being for the purpose of securing the best quality of meat and preventing disease, especially tuberculosis, as far as possible. For this purpose the pasteurisation of skim milk was also rapidly introduced into the Cooperative Dairies.

The incentive would act still more effectively on breeders if the prices of second and third quality and of unhealthy pigs were lower; in this sense, certain changes have already been proposed with respect to the system of accounts. In any event, the system of payment according to quality and the work done direct by the abattoirs for improvement of the breed, has already produced noteworthy results.

For several years past, indeed, a perfectly perceptible improvement is found in the quality of the pigs supplied to the Abattoirs.

Comparing the number of tuberculous pigs delivered to Cooperative Abattoirs with those to private abattoirs (this being the only possible point of comparison) it is found that the former is always less than the latter, as is shown by the following table :

Year	Percentage of tuberculous pigs	
	In cooperative abattoirs	In private abattoirs
1907	3.62	4.55
1908	3.75	4.96
1909	4.41	5.32
1910	4.25	5.14
1911	4.32	5.05
1912	4.48	5.49
1913	4.99	5.32

Even assuming, however, that the difference is due to other factors also, one cannot but recognise, nevertheless, that the work of Cooperative abattoirs in improving the quality of pigs has yielded good results.

To avoid ill treatment of the animals during transport, which would impair the quality of their meat, the abattoirs urge farmers not to drag them violently or strike them, and the railways to use suitable cattle trucks with proper stalls for this service, and employ every care in loading and unloading the pigs.

As was already stated, the Cooperative businesses likewise took the initiative in the introduction of compulsory inspection of exported meat, subjecting it to so effective an examination as completely to reassure the English buyer and satisfy the requirements of English law, guaranteeing at the same time the excellent quality of the meat exported from the point of view of health. It should indeed be noted that Danish legislation in this matter has often anticipated, and even exceeded, the severest provisions of English law. For the rest, other countries, such as Sweden, Holland, Belgium and Australia, have also been compelled to establish inspection of the exported meat of the pig, and to modify and render more severe the corresponding legislation in order to comply with the enactments of English law.

After a series of modifications and extensions rendered necessary by experience, to-day, on the basis of the meat exportation law of the 27th May 1908 and the decree of the Minister of Agriculture of the 9th October 1915, the inspection comprises all the abattoir products intended for the food of man.

To carry on the business of an exportation slaughter house there is required an authorisation issued by the Ministry of Agriculture, which appoints the veterinary officer to carry out the inspection and fixes the salary to be paid him by the abattoir. The veterinary officer or a duly authorised substitute must be present at the different operations of the abattoir and exercise active supervision over the entire undertaking. The animals for slaughter must be examined by him before and after killing, with organs intact and identifiable.

The classification of the meat, accessory products and offal is made according to the instructions of the Ministry of Agriculture, and stamping and marking are performed by the veterinary officer himself or under his direction. The so-called Lurmarke (trade mark) introduced by the order of the 30th August 1906 as a mark common to all meat of the pig of Danish origin may only be affixed on the flesh of animals free from any symptom of disease, especially ricketts and tuberculosis. In addition to the above officer, there are two inspectors who pay unannounced visits to the abattoirs of the territory assigned to them.

The supervision of exportation was completed by the law of the 13th May 1911 regarding meat for home consumption. This law subjects abattoirs to general supervision from the hygienic point of view likewise, and the Ministry of Justice is called upon to see to the cleanliness of the premises, the utensils and the working clothing, hygiene among employees, and observance of the rules for preventing soiling of the meat during transport.

The checking and classification by the veterinary officers are of course for health purposes only, while the classification to determine the price of the goods is done by the abattoir, and usually the manager in person.

The manner of cutting up the carcase is also of no small importance from the economic standpoint, the object being to secure the maximum of bacon and the minimum of residue. Some abattoirs were accustomed for this purpose to leave adhering to the sides of bacon too much of the shank

and the thin fatty streak at the neck and snout. These methods have more than once, as stated, called forth strong protests from English importers.

Of great importance likewise is curing. At first so-called dry salting was mostly used, but the experiments carried out at the agrarian experimental stations proved that on the system of brine salting the yield of bacon was about 1.6 % greater, corresponding to an additional receipt of about 1 crown (krone) per pig, because the meat was more fully impregnated with the salt mixture, without deteriorating in appearance or quality. Therefore, from 1906 onwards, the abattoirs everywhere adopted the second system. The method may, nevertheless, give rise, and did indeed give rise for some time, to abuses on the part of abattoirs, causing the resentment of the English buyer. Today on the other hand complaints with regard to salting and cutting are rare. The abattoirs have learnt from experience that it does not pay to impair the good reputation of one's own product for a small profit, apart from the fact that this mode of action would be severely condemned by public opinion, because it injures not only the individual slaughter houses but the reputation of all Danish pig meat, especially now, after the introduction of the single trade mark (*Lurmarke*).

Of great importance also, the goods being highy perishable, is rapidity of transport from the abattoir to the consumer, on the safest and most hygienic method, with the least possible shrinkage. All these problems are thoroughly discussed by the abattoirs and subjected to experiments and study. Of course all the abattoirs have junction lines to the trunk railways, so that the goods are conveyed direct from the warehouses of the factory in cold storage waggons ; indeed, the large slaughter houses even have their own cold storage waggons, which they let to the railways.

Carriage to England is chiefly by way of Esbjerg-Parkeston, and from this city by rail to London. The Danish exporters have also endeavoured to establish direct communication with London, avoiding transshipment, and the section of railway, but they have ended by returning to the original route.

For the rest, it is calculated that two days after forwarding, the goods leaving the slaughter house reach the hands of the London buyer.

The State moreover came to the assistance of the exporters by subsidising the Esbjerg-Parkeston line, which subsidy was certainly of great importance in the past but has now been done away with, because it was rightly said that after having for so many years availed themselves of this route the breeders can very well bear the costs of transport alone.

As we have already stated, there do not exist with regard to cooperative abattoirs any such data of operations as are available for dairies ; some few particulars, especially as to their ouput, may be gathered from the official statistics of production in 1913.

The principal product exported is slightly salt bacon produced from the meat of the pig. In 1913 it formed 80 % of the total of production, while other articles made from pig flesh, not salted or highly salted, yielded

only 5 %. About 15 % of the production value is obtained from the residues or offal, which are reckoned at 10 kroner per pig. The utilisation of the residues and offal is therefore a matter of the utmost importance. A great quantity is salted without special manipulation ; this is the case with regard to the heads and feet, the value of which is calculated at about 1.25 kroner per pig. The same may be said of the backbone, the leg, the neck, and to a great extent of the so-called plucks, i. e. the liver, kidneys, heart etc. Of these however a great part is utilised in the factories of sausages and food preserves, for the manufacture of liver patés. The value of these various residual products is calculated at about 3,50 Kroner per pig.

For the utilisation of other products, the abattoirs on the other hand have special installations. Thus, there is a department for the purification of fat, in which the fat is melted, sterilised, and then classified according to quality. Lard is indeed of great importance and its value is about 2.50 to 3 Kroner per pig. Each slaughter house furthermore has a factory of sausages and food preserves, the size of which depends on the number of pigs killed and the portion of the residues which can be sold in the natural state.

Some abattoirs also have special installations for cleaning the guts, but in most cases this operation is put out at fixed rates to independent undertakings. The guts and paunches are secondary products of some importance sold abroad, the guts to the German sausage factories, and the paunches in England. Their value amounts to about 1 krone per pig.

The blood is also utilised. In the early times chemical manures were made with the blood, the bones and other clean offal ; at the present time, on the contrary, it is converted into a special flour, an excellent food for animals, especially poultry, horses, and pigs themselves. About half the slaughter houses have their own factories of this food flour.

The residual products of the slaughter houses, especially sausages and preserved meats, are sold for the most part in Denmark ; the bacon however is exported, and only about 8 % by weight and 6 ½ % in value remains in the country.

The home market, for the rest, including Copenhagen, is supplied chiefly by local abattoirs ; the cooperative abattoirs are only able, in the majority of cases, to increase the quantity sold by opening their own selling depots. Each abattoir has one or more selling depots in the cities where it is located, and sometimes in neighbouring cities too. In Copenhagen on the contrary there are already so many retailers that the cooperative abattoirs feel no inducement to follow this thorny path. There on the other hand they have organised sales by means of a collective selling office.

The case is different with regard to residual products, sausages and preserved meats.

The demand for these inexpensive products is so great that the small local butchers cannot meet it ; therefore the cooperative abattoirs sell the greater part of such products at home direct. The sale, for the rest, is generally speaking not organised, at least outside of Copenhagen. Each

abattoir makes provision for its own region, partly by opening a sales depot and partly by forwarding the goods direct to the country consumer, partly again by means of cooperative societies of consumers and small butchers' shops in town and country.

Yet a considerable quantity of residual products is forwarded abroad, and indeed exportation of late years has tended to increase, in view of the growing extension of pig breeding.

The exportation of residual or bye products, including fat, was as follows :

Year	Millions of Kroner
1913	8.9
1912	7.7
1911	7.2
1906-1910 average	5.6

The exportation is directed especially to Germany and England ; heads and feet to England, particularly Ireland ; livers, hearts, kidneys, and such parts, and the fat, almost exclusively to Germany. The sale of pigs' meat abroad, the sale of the bacon, will be dealt with elsewhere.

Having made these general observations on the production and market, we shall now endeavour to give some fuller details as to the financial development of the cooperative abattoirs, first taking some data from the balance sheet and annual report of one of these undertakings, the first to be formed and one of the most important : " the Horsen Cooperative Abattoir " (Horsens Andelssvineslagteri). For the rest there are no great differences between the various cooperative societies ; the general working expenses alone can vary perceptibly according to the size of the undertaking. Therefore one abattoir may be taken as a type of its kind.

Horsen Cooperative Swine Abattoir.
Report of Financial Year 1st July 1913-30 June 1914.

RECEIPTS.		Kroner Öre	Kroner Öre
Brought forward from previous year			3,422.21
Sale of Bacon.			
London:			
64,762 pigs of a weight of Kg	3,650,270 —		
Shrinkage . . . . »	58,807 ½		
Net weight . . . Kg.	3,591,462 ½	4,424,383.57	
Bonus of the *Danish Bacon Company*		11,921.40	
North of England:			
19,459 pigs of a weight of Kg.	1,175,857 ½		
Shrinkage. . . . »	17,847 ½		
Net weight . . . Kg.	1,158,010 —	1,408,952.15	
			5,845,257.12
Sale of Pigs.			
at *Copenhagen* . . . . pigs	2,373 —	130,530.02	
at *Horsen* . . . . . »	503 ½	32,377.32	
to Sausage factories . »	1,441 —	93,311.93	
destroyed because died a natural death . . »	113 —	757.68	
destroyed because condemned . . . . . »	356 —	2,288.15	
			259,265.10
Sale of Sows and Boars.			
England: Sows and Boars	721	64,102.59	
Copenhagen: » »	152	12,836.71	
Horsen » »	104	10,375.43	
Sausage Factories: Sows and Boars	551	54,460.96	
Destroyed Sows and Boars . .	23	257.45	
	1,551		
Bye-products and offal of 1,551 Sows and Boars		10,754.00	
			152,787.14

EXPENDITURE :		Kroner Öre	Kroner Öre
Sales of Calves and Oxen.			
Sausage factory . .	2,266 calves and oxen	46,541.94	
To shops	297 » » »	15,030.52	
Sold : Sucking calves	731 » » »	10,357.06	
Skins and offal		30,335.81	
Stock in hand		30.00	
			102,295.33
Sale of fat and bye-products.			
Receipts for fat and bye-products		753,303.61	
Receipts for fe tilisers		728.14	
Profits of Sausage factory and shops . . .		25,475.01	
Stock of fat, bye-products and offal at 30/6/914		17,812.91	797,319.67
Fines paid (9 pigs at 10 kroner each) . . .			90.00
Stock of pigs' flesh at 30/6/1916 :			
5,569 ½ pigs		341,721.45	
47 » (part condemned)		2,691.89	
28 sows.		1,970.81	
			346,384.15
		Total . . .	7,506,820.72
Stock of pigs' meat at 1/7/1913:			
2,670 pigs		204,026.58	
14 sows		1,411.84	
			205,438.42
Received in all 93.519 *pigs :*			
91,598 pigs for slaughter weighing kilogrammes 6,214,674		6,467,402.90	
Further payment at öre 3,8 per klg.		246,157.61	
356 pigs wholly condemned of a weight of kilogrammes 22,881 ½		15,768.43	
Costs of transport and delivery . . .		42,125.16	
			6,761,454.10
(Average price, including further payment and sums carried forward öre 108,92 per kilo).			
1,565 Sows and boars			146,454.77
3,294 Oxen and calves			102,622.38

	Kroner Öre	Kroner Öre
Working expenses:		
Salaries	110,088.46	
Salt and Saltpeter	29,789.79	
Meat packing	42,095.58	
Fuel and lighting	14,152.80	
Insurance	4,831.82	
Books, Paper, Printing	4,160.55	
Advertising	1,440.59	
Board and committee meetings and travelling	2,622.20	
Horses and carts	6.929.69	
Repairs	16,054.02	
Veterinary inspection	9,793.40	
Joint office, taxes, postage, telegrams	11,457.45	
Interest:		
Paid 16,990.38		
Received 5,448.42		
	11,541.96	
Prizes at Cattle Shows 400.00		
Contribution to the experimental Station and to breeding centres 1,232.70		
Special prizes for boars 850.00		
	2,482.70	
		267,440.40
Redemption and depreciation	20,000.00	
Carried forward	3,410.65	
		23,410.65
	Total	7,506.820.72

Statement at 30th June 1914.

ASSETS:	
Installation costs of abattoirs	226,879.02
New constructions	27,416.28
Cash in hand	28,534.51
Shares in *Danish Bacon Co.*, London £ 904,0.0., equal to	16,362.40
Deposited for insurance aga nst workmens accidents	1,000.00
Establishment of a shop with ice safe and kitchen in the Söndergade	17,863.16

Stocks :	Kroner Öre	Kroner Öre
5,569 ½ pigs	341,721.45	
47 » (part condemned)	2,691.89	
28 Sows	1,970.81	
Stock at sausage factory	24,958.18	
» at shop at the Nörregade	282.92	
» » » » Söndergade	1,278.40	
» » » » abattoir	678.12	
Fat, offal, etc.	17,812.91	
Calves' paunches	30.00	
Salt and saltpeter	953.05	
Packings for bacon	8,100.04	
Knives, etc.	282.60	
Oil, etc.	191.10	
1 Lorry	6,000.00	
		406,951.47
BOOK DEBTS OUTSTANDING:		
England	32,471.15	
Germany	13,805.05	
Denmark	16,964.29	
Bankruptcy claim in the estate of the sales office of the Walby abattoirs which will presumably yield a dividend of	5,000.00	
		68,240.49
	Total . . .	793,247.34

LIABILITIES:		
Rural Savings Bank:		
Loan at the beginning of the year	170,250.00	
Repaid during the working year 1913-14	20,000.00	
		150,250.00
Redemption account		139,750.00
To the Bank of Horsen and environs		160,878.52
Undistributed surplus		1,846.88
Sundry Creditors :		
Danish Bacon Co. London	80,678.08	
1 Creditor	275.60	
		80,953.68
Liabilities paid off	20,000.00	
Further payment to members	236,157.61	
Carried forward to new year	3,410.65	
		259,568.26
	Total . . .	793,247.34

The abattoirs, which slaughtered altogether 93,519 pigs, besides 3294 calves and oxen, operated at the end of the year with a capital totalling about 800,000 kroner. About one half of this was invested in stocks of products, auxiliary materials and implements. The book value of the abattoir was relatively small, namely 226,879 kroner, but further constructions were in contemplation and had partly been begun. The foundation capital had been raised by a savings bank loan of 310,000 kroner, which had now been reduced to kr. 150,250. The working capital was provided partly by calls still due, partly by a loan or cash credit of varying amount at the local Bank.

Of the 93,519 pigs which the abattoir received, 91,598 were pigs of the association, with a share in the further payment and capital put aside. The average weight was 67.8 kilogrammes (warm, with plucks and 10 % deducted). The abattoir paid for these an average price of öre 108.92 per klg., including further payment (öre 3.8 per klg.), sums put aside and costs of carriage and receipt. These expenses amounted per pig to 46 öre and per kilogramme to öre 0.68; therefore the abattoir paid its members for the pigs öre 108.24 per kilogramme, or kr. 73.39 per pig.

The working expenses have grown uniformly for a number of years. During the financial year 1913 they were kr. 2.86 per pig. They are distributed as shown in the following table, which also shows how they were made up for the previous year.

Working expenses per pig, in öre.

Year	Number of pigs	Wages	Salt and Saltpeter	Packing for meat	Fuel and lighting	Insurance	Books, paper, and printing	Advertisements	Management	Horses and Carts	Repairs	Meat Inspection	Joint Office, taxes, postage, telegrams	Interest	Sundry	Total working costs
1912-13	76,397	120.0	33.4	38.4	15.4	5.4	4.1	4.0	2.7	5.4	16.6	11.6	11.5	2.5	6.0	277
1913-14	93,519	117.7	31.8	45.0	15.1	5.1	4.4	1.6	2.9	7.4	17.2	10.5	12.3	12.3	2.7	286

Salaries here represent the biggest item. The abattoir employs in all 60-61 men, of whom 7-8 are in the office, besides the manager. In addition, men are employed by the day. Among the actual workers in the abattoir only the foreman is technically trained. In consideration of this, the wages specified in the following table are in any case not below the standard for unskilled labour. Wages, working hours, and other conditions of work are arranged by agreement between the combined Danish Cooperative

Abattoirs and the Labour organisations, and are therefore to some extent uniform in the different abattoirs.

Wages in the Horsen Cooperative Abattoir.

Financial Year 1913.

	Kroner
Supervising Board Member	500.00
Manager	8,400.00
Cashier	2,600.00
Book-keeper	2,500.00
5 clerks	4,985.00
Auditors	600.00
Foreman-Slaughterman	2,250.04
Forwarding clerk	1,481.25
Chief machine man	1,560.00
Stoker	1,170.00
10 men at 26 kroner per week for 26 weeks	14,040.00
» » » 28 » » » » »	
12 » » 25 » » » » »	16,224.00
» » » 27 » » » » »	
14 » » 24 » » » » »	18,564.00
» » » 27 » » » » »	
3 » » 23 » » » » »	3,822.00
» » » 26 » » » » »	
» » » 22 » » » » »	3,666.00
» » » 25 » » » » »	
» » » 21 » » » » »	3,510.00
» » » 24 » » » » »	
3 women at 14 » » » » »	2,496.00
» » » 18 » » » » »	
Overtime	16,277.37
Day or casual labour	5,442.80
	110,088.46

With regard to the working costs, the Horsen Cooperative Swine Abattoir is certainly, considering it is one of the biggest, rather more favourably placed than most others. According to a calculation for the year 1909, the ratio is that the smallest abattoirs show about 1 kr. higher working expenses per pig than the largest.

Working Costs of Cooperative Abattoirs in 1909.

Number killed per annum	Number of abattoirs	Working cost per pig (kroner) per pig.
70,000 pigs and more	4	2.27
from 50 to 70,000	5	2.42
» 30 » 50,000	7	2.81
» 20 » 30,000	3	2.88
» 10 » 20,000	9	3.20

§ 4. Danish bacon on the english market and the importance of cooperative abattoirs as sales societies.

The major portion of Danish exported pigs' flesh goes to London. Only a small percentage goes to other countries, chiefly uncured meat for which Germany is the principal buyer. This meat is usually the product of sows and small pigs not suited for making bacon.

Export of Danish Bacon.

Year	England. Millions of kilogrammes	Other countries. Millions of kilogrammes	Total. Millions of kilogrammes
1907	94.3	2.1	96.4
1908	106.5	2.8	109.3
1909	92.5	2.5	95.0
1910	95.1	1.7	96.8
1911	111.8	2.6	114.4
1912	120.2	7.3	127.5
1913	123.7	2.7	126.4

The concentration of exports in combination with the growth in pig breeding gradually led to Denmark becoming the chief supplier of England. This development is rendered clear by the following table, which at the same time supplies information as to the difference in price between Danish bacon and that from other countries :

TABLE II.

British Imports of Bacon.

Country of origin	1891-95	1896-1900	1901-05			1906-10			1911			1912			1913		
	millions of kilogrammes	millions of kilogrammes	millions of kilogrammes	*öre* per kilogramme	millions of kroner	millions of kilogrammes	*öre* per kilogramme	millions of kroner	millions of kilogrammes	*öre* per kilogramme	millions of kroner	millions of kilogrammes	*öre* per kilogramme	millions of kroner	millions of kilogrammes	*öre* per kilogramme	millions of kroner
Denmark	38.1	56.6	71.2	100.2	71.3	90.6	109.5	99.2	107.7	111.8	120.4	117.7	119.8	141.0	118.5	134.6	159.6
United States of America . .	131.6	177.8	162.1	82.0	133.0	112.7	94.1	106.0	92.3	98.8	91.2	86.2	101.6	87.5	91.5	120.4	110.2
Canada	12.8	23.1	36.0	84.4	30.4	43.0	97.3	41.9	31.2	103.4	32.3	19.7	107,8	21.2	12.3	125.6	15.5
Other countries	5.4	4.0	4.4	90.9	4.0	8.3	109.6	9.1	25.8	103.2	16.4	11.6	105.6	12.3	24.2	117.6	28.4
Total (excluding Denmark) . .	149.8	214.9	202.5	82.8	167.4	164.0	95.7	157.0	149.3	100.4	139.9	117.5	103.0	121.0	128.0	120.4	154.1
Aggregate total	187.9	271.5	273.7	—	218.7	254.6	—	246.2	257.0	—	260.3	235.2	—	262.0	246.5	—	313.7
Percentage of Denmark. . . .	20.3	20.8	26.0	—	32.6	35.6	—	40.3	43.3	—	46.3	50.0	—	53.8	48.1	—	50.9

The share of Denmark grew from 20.3 % in the 5 years 1891-1895 to about 50 %. This progress was made at the cost of the United States, which formerly supplied $^2/_3$ but today only $^1/_3$ of British imports. Besides the United States, only Canada is of any importance as a competitor. Canada however, after making progress for some time, is again showing a decline, and its aggregate deliveries are about the same now as at the beginning of the period.

American pigs' flesh is more and more absorbed by the home market ; this has come to be the chief reason of the high prices for this meat in England, and the great stride in Danish pig rearing and export of pig meat is an indirect result of this.

The table further shows that this Danish meat continually fetched a much higher price than that of the remaining countries. The share of Denmark in the imports is much higher by value than by weight. The table given below exhibits the excess price fetched by Danish bacon over the average price of the meat from all other countries in the years 1899-1913.

Excess price for Danish Bacon 1899-1913.

(In *öre* per kilogramme).

1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
28.8	29.4	30.0	16.4	11.4	14.2	18.4	15.0	11.4	12.4	12.8	4.6	11.4	16.8	14.2

The excess price on the whole showed a strong decline in the years 1901-1910, not indeed on account of any likelihood of the quality of the meat from other countries becoming equal to the Danish, nor yet again owing to deterioration in the quality of the Danish meat. On the contrary the reason undoubtedly was that the growing quantities of Danish bacon etc. had to find a market among new classes of the population with lower purchasing power, and who had previously been in the habit of giving preference to the cheaper American article. During the last couple of years, now that Danish bacon has gained a firm footing among these new classes of buyers, the difference in price has again increased. The cooperative abattoirs may claim the major portion of the credit of this difference in price, which is significant of the good quality of Danish pigs' flesh. To Danish agriculture this excess of price means an increased income of 10 to 15 million kroner per year.

Both by reason of the large quantities and of the uniformly good quality the Danish meat has a strong hold of the English market, which is further strengthened by the fact that deliveries undergo no great fluctuations from year to year, which would make it difficult to get a firm connection among buyers. The main cause of this stability is to be found in the close relation between dairying and pig breeding in Denmark. The American production of pig meat is dependent mainly on the crop and price of maize, and therefore fluctuates with it from year to year.

In spite of the excellent position of Danish bacon in England, the cooperative abattoirs, which supply $^5/_6$ of it, and thus command the Danish bacon export, have not yet reached the point of exerting a direct and decisive influence on market and sales conditions, which would have been natural in view of their uniform organisation and joint work which they have organised in other departments. Up to 1909 Danish bacon was not even quoted separately in official market reports, but only in conjunction with that from other countries under the common description of continental, while Irish, American and Canadian bacon each had their independent quotation. This shows to what a small extent the cooperative abattoirs had made their influence felt, and even at the present day the English middlemen exercise the chief influence both on the quotation and on the middlemen's profit on Danish bacon.

The sale of the meat takes place through English commission agents, who sell it to the wholesalers, the latter in turn to the retailers. The commission agents and wholesalers, who are very few in number, have formed a ring for the purpose of ensuring the middlemen's influence in the bacon trade and their profit. The agents are bound to sell to the wholesalers alone, the latter in turn being bound not to buy direct from the abattoirs. As a result of this agreement, the agents control the sale in England, and exert a decisive influence on the quotation, while on the other hand, the position of the wholesaler is also secure. In addition to this, a single firm of agents, Messrs Denny and Son, who own a number of Danish private slaughter houses, occupied so commanding a position for a number of years that it could actually have dictated the quotations. It need hardly be said that a quotation reached in this way is very liable to be affected by speculative considerations, not in keeping with the real market conditions, and detrimental both to the abattoirs and the retailers. The private slaughter houses and the large middlemen generally are interested in a rising market. When the price cannot be forced up any further, the next step is, by a rapid reduction of price, to create new opportunities for profit both in England and especially in Denmark. The cooperative abattoirs and the English retailers, on the contrary, as representatives of the producers and consumers, are only interested in a steady and undisturbed market, in which supply and price shall correspond as closely as possible to the demand of consumers.

In order to remedy the unfavourable conditions of the bacon trade, the Company mentioned above, the Danish Bacon Company, was formed. Its object is, in brief, to reduce the selling expenses, to break the bacon ring, and to establish an independent quotation for Danish bacon in order in this way to secure higher prices and better market conditions.

The foundation of this Company was laid as early as 1902 by the formation of the Danish Bacon Agency. This concern, to begin with, bore the character of a private undertaking, as only 3 slaughter houses had joinned. In 1906 however the business became the property of the 6 abattoirs who had combined for that purpose, and the "Danish Bacon Company" was formed. In 1912 it was compelled under English law to be converted

into a share company, but in reality it has retained the character of a co-operative society. 14 abattoirs are the owners of this Company. The turnover, which in 1902 was about 5 million Kroner and in 1907 12 ½ million Kroner, was in 1913 33 million Kr.

The Company at first tried to sell the bacon to the wholesalers as the agents did. The bacon ring however prevented relations with the buyers by threatening a boycott. Nothing remained but to go behind the wholesalers direct to the retailers, and that has since been the principle of the Company. This method of selling also enables higher prices to be paid than those allowed by the agents, as the wholesalers pocket a not inconsiderable profit.

Furthermore, the arrangement that one half of the surplus goes to the buyers is a strong bond of the latter towards the Company.

The commission was, as early as 1902, fixed at 2 %, while the general agent's commission was 2 ½ to 3 %. The selling expenses actually amounted to barely 1 ½ %, a considerable surplus being distributed. In 1912 the Danish Bacon Company reduced its commission to 1 ½ %, but a surplus still remained over, so that the selling expenses only amount to about 1 %.

The competition of the Danish Bacon Company with the agents and retailers has not been without influence on selling expenses and the market conditions generally. The agents were in 1903 compelled at once to follow suit by reducing the commission from the normal 2 ½ or 3 % to 2 %; later on several agency firms still further reduced their commission. The agents' commission may today certainly be estimated at 1 ¾ % taken all round. Of course the competition of the Danish Bacon Company has also affected the profits of the wholesalers, but to what extent it is impossible to say.

The Danish Bacon Company controls between ¼ and ⅕ of Danish bacon, and is therefore even now a factor to be reckoned with in the bacon market.

The fact of the Company having a fixed connection makes it to some extent independent of the quotation of the agents, but its turnover is not yet sufficient entirely to overcome the power of the bacon ring and form an independent quotation. Yet there are certain signs which point to a decline in the power of the ring. Of late years it has had to extend its previously very narrow limits, and just as the Danish Bacon Company has repeatedly forced its own quotation on the market for a short time, several firms of agents have seceded and disregarded Denny's quotation.

Therefore, even though the Danish Bacon Company has not yet fully solved this problem, it has nevertheless secured good results. The mere reduction of the selling costs by ¾-1 ¼ % — which it brought about, means about 1 million Kr. per year to the cooperative abattoirs, and it is open to no doubt that a large reinforcement of the Danish Bacon Company by the adhesion of new members is the method by which the cooperative abattoirs may attain to that influence on market conditions in England to which their importance as producers entitles them.

Not until this has been done will the cooperative abattoirs have ful-

filled their mission as cooperative salesmen, which consists in limiting the difference between the payment of the English buyers and the receipts of the Danish producers as far as possible.

This aspect of the activity of the cooperative abattoirs is hardly less important than the work done by them as producer societies by their direct and indirect exertions for the betterment of the pig breed and their achievements in purely industrial operations in raising the quality of Danish bacon.

The importance of the cooperative abattoirs as selling societies however is not amenable to direct observation, partly because it is difficult to consider alone, but chiefly because the cooperative abattoirs now occupy so predominating a position in competition with private slaughter houses that they fully control bacon etc. quotations. The private slaughter houses are compelled to keep their quotation on a par with that of the cooperative abattoirs. From the surplus therefore which the cooperative abattoirs pay to their suppliers in addition to the quoted price paid, a judgment may be formed of the advantage which at the present moment lies in joining a cooperative abattoir, apart from the profit which these abattoirs have brought to the farmer by raising bacon prices. This latter cannot be measured at all, but there is no doubt that the importance of the cooperative abattoirs lies in this point chiefly.

The utterly anomalous conditions of price which were really the cause of the formation of cooperative abattoirs, would no doubt gradually have obviated competition between private slaughter houses. But certainly the private slaughter houses, if they had been in sole control, would perpetually have been able to secure for themselves considerable advantages at the cost of the farmer, if only for the reason that in order to kill for export, big concerns with large capital are needed, which in itself involves a certain limited monopoly, especially on a small market. Besides this, however, this position of limited monopoly forms an incentive to combination in order to make the monopoly more absolute, which appears to be no very remote possibility in view of experience in America.

ITALY.

THE NATIONAL BANK OF ITALIAN RURAL CREDIT SOCIETIES AND ITS FIRST RESULTS.

SOURCES:

PROGRAMMA PER L'ISTITUZIONE DI UNA BANCA NAZIONALE DELLE CASSE RURALI ITALIANE (*Programme for the Establishment of a National Bank of Italian Rural Credit Societies*). Rome, 15th May 1913.

STATUTO DELLA BANCA NAZIONALE DELLE CASSE RURALI ITALIANE (*Bye-laws of the National Bank for Italian Rural Credit Societies*). A cooperative limited Society with unlimited capital, with chief office in Rome.

RESOCONTO PER IL 1915, 1° ESERCIZIO, DELLA BANCA NAZIONALE DELLE CASSE RURALI ITALIANE (*Accounts for* 1915, *1st Financial Year, of the National Bank of Italian Rural Credit Societies*). Report of the Managing Board and the Auditors to the ordinary General Meeting of Members in Rome, 5th March 1916. Balance sheets and documents annexed. Rome, Stabilimento Tipografico Betani, 1916.

The proposal to incorporate the National Bank of Italian Rural Societies in the form of an Italian limited company (cooperative) was put forward in May 1913 by a large promoting committee, the honorary chairman of which was the Hon. Luigi Luzzatti, and actual Chairman the Hon. Leone Wollenborg, now chairman of the Bank.

The "Programme" set out that the rural societies, which have attained to great importance in Italy owing to their wide diffusion and the business they transact or supervise, "had found and often still find in savings Banks, popnlar Banks, ordinary Banks, and the Institutes created by State law on regional agrarian loan facilities, strong support and enlightened guidance; nevertheless in many parts a body is wanting which should be able to assume a function of guardianship over the said rural societies, assisting them in their earlier and more difficult steps, aiding them to overcome momentary difficulties resulting from big and unexpected withdrawals of deposits or from temporary crises, and in short affording them permanent aid".

The Bank therefore must be an economic centre for the rural societies, with the duty also of equalisation, alternately receiving from them and reserving for them the sums which, owing to the nature of rural credit societies, are at times in excess and at others deficient.

Debarring all ordinary bill of exchange operations with private persons, the Bank to be formed also called upon the private friends of the co-

operative movement to become shareholders (assigning to the shares a maximum annual interest of 5 % on the nominal value of L. 100) being well aware that in this way it would be much easier to get together a sufficient capital.

In the course of its propaganda, the promoting committee came to the conclusion that a Bank such as that proposed, might assist the development not only of rural societies but also of other agrarian associations, cooperative and mutual, and therefore access was also allowed to the latter as regards subscription of shares and the use of financial facilities.

A special question had arisen in Italy with regard to the agrarian societies (rural financial societies, agricultural unions, etc.) of a particular religious denomination. As these have a special organisation laid down by the Holy See through economic and political organs under its direct dependence, and as therefore their financial assistance is also selective and connected with the organisation itself, the only conclusion which could be arrived at was that the proposed central body for cooperative agrarian loan finance could only serve for the development of agrarian cooperation when not limited by political or denominational restrictions.

Such a central body indeed could have done no less than make the work of inspection and checking of the adhering societies the basis of its entire regulations, and as the National Federation of Rural Credit Societies already acting as a self-governing body was and is performing this service for rural financial societies and other agrarian institutions it, was thought fit to strengthen the arrangement that the Federation should continue to watch over agrarian institutions by its own technical means, it being laid down as a condition for admission to membership of the Bank that the Societies should accept the control of the Federation and should likewise join the latter.

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The Bye-laws of the National Bank are of the simplest, as appears from the following fundamental clauses :

Clause 1. A Limited Cooperative Society is formed with unlimited capital, under the style of "National Bank of Italian Rural Credit Societies."

It adopts all the provisions of the Code of Commerce save in so far as otherwise lawfully provided in the present Bye-laws.

Clause 2. Its principal object is to subsidise rural credit societies and other cooperative and mutual societies aiming at the extension of financial facilities among small farmers.

Clause 3. The Society shall have a duration of 25 years, with the right of prolongation.

Clause 4. Its seat is in Rome at its office, and it may, by resolution of the Board of Directors, appoint agencies, representatives and branches in other communes in Italy.

Clause 5. The assets of the Company shall be made up :

a) of the shares subscribed by the members, the nominal value of which is 100 lire each ;

b) of the reserve fund ;

c) of special funds established for specific operations.

Clause 6. After formation of the Society anyone desiring to be admitted to membership shall make a written application to the Board of Directors, declaring therein that he submits to the obligations laid down by the Bye-Laws, regulations and resolutions of the Society.

Clause 7. The following belong to the Society by adhesion to the deed of formation, and subsequently in consequence of acceptance of the application referred to in Clause 6.

a) Rural or agrarian credit societies or kindred institutions having joined the National Federation.

b) Any physical persons or body corporate who can lawfully assume the obligations arising from the present article.

Clause 8. The member shall :

a) Pay 5 lire when making application for membership, which sum will be refunded if the application is refused.

b) Acquire at least one share.

c) Be liable up to the amount of the shares subscribed by him for all the liabilities of the Society.

Clause 9. The shares must be fully paid up at the time of signature in the register of members, or as to $^3/_{10}$ only on signature and the balance in equal monthly instalments.

Clause 13. Withdrawal from the Society as contemplated in Article 120 of the Code of Commerce, is not allowed.

Clause 14. In the case of death of a member, the heir, if not already a member, or if he does not become a member within three years, must dispose of the shares which have passed to him.

Otherwise the Bank may suspend payment of the dividends and redeem the shares, or likewise transfer them to another member.

Clause 15. The shares are registered and personal, and cannot be transferred or subjected to pledge or lien unless with the consent of theBoard of Directors.

They are under lien in favour of the Society for all the obligations of whatsoever kind of the member towards the Society.

Clause 16. Rural Credit Societies which are members may, on resolution of the Board of Directors, be the transferrees of shares held by other members against repayment of their amount at the price of issue.

Clause 17. The Society may undertake the administration of special funds and carry on all banking operations, but with the strict exclusion of speculative or stock exchange operations.

Clause 18. For the purpose of promoting the objects of the Society by assisting and watching over cooperative loan Associations, the Board of Directors shall, every year, among the annual expenses, appropriate a special fund.

For the same purpose, the Board of Directors may make suitable arrangements with the National Federation of Italian Rural Credit Societies.

The other clauses meet the ordinary requirements of the Code of Commerce, and exhibit no substantial variations in comparison with the Bye-laws of cooperative Societies. The regulations of the National Bank develop and define the ideas briefly set out above.

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The Bank began its operations on the 1st January 1915 with the modest assets of about 125,000 lire, having secured an ample rediscount of its bill holdings, by way of favourable trial, from the Bank of Italy and some flourishing cooperative Banks.

The conditions created by the European conflict and the special behaviour of the Italian market practically at the outset of its operations, prompted the Bank to use every necessary caution in developing its work. Nevertheless, and although the first financial year is to be regarded as a trial, the results secured are worthy of attention.

The amount of loans during 1915, all of them against short date bills (4 months, and by way of exception 6 months) was L. 948,829.28, which figure is particularly gratifying when compared with that of the operations carried out even by larger agrarian financial Institutions in their first period.

The 1915 balance sheet closes with a small deficit (L. 2870.51) and the report of the Board of Directors justifies this and makes provision for meeting it.

The method of conducting the operations is simple : the National Bank of Rural Financial Societies is acquainted with the position of its member societies owing to the visits paid by the Inspector of the above mentioned Federation, and the relations maintained with the respective directing Officers by the Manager of the Bank, who is also the Manager of the National Federation of Rural Credit Societies.

The Inspector, in addition to his personal impressions, which he reports to the Board, brings with him on returning from his journey a copy of the report of inspection and audit for each Society, with all the necessary notes and forms. It would be worth while to dwell a little longer on this matter, in order to give a detailed illustration.

The Management of the Federation, and therefore that of the Bank, has a file in which each agrarian Society has or will have its place, for keeping the bye-laws, statements of accounts, balance sheets, reports, etc., etc. On the basis of these documents, on the report of the Manager, the Board of Directors of the Bank fixes the credit which may be allowed to each agrarian Society, either by discounting bills or by direct loans.

The items standing to the debit or credit of Societies of course undergo periodical and extreme variations. The Societies to whom financial acco-

modation is allowed need only forward to the National Bank the bills of exchange held by them or their own acceptances, in order to receive by return the net proceeds, which are remitted in the form of free banking drafts of the Bank of Italy payable at sight, issued by the National Bank itself.

With the growth of operations, and the spread of the area of influence of the Bank, the service of assistance and audit of the Societies will necessarily be organised on a larger footing, and the provision made by Clause 4 of the bye-laws will have to be taken into account, unless for the time being it is thought simpler to make use of the work of corresponding Banks.

Up to the present it has only been sought to get the concern launched on a judicious basis, with moderate expense ; notwithstanding this, the financial year 1916 already shows results superior to the preceding year. During the first 4 months of the current year the total of loans granted has almost reached the total for the year 1915, and the revenue exceeds the expenditure. Deposits also show a considerable increase. The statement of accounts at the end of April showed deposits for nearly 170,000 lire, and these will certainly be further increased.

In conclusion, the new National Bank of Italian Rural Credit Societies must be judged not so much from what it has been able to accomplish in an initial period of such great stress as on the basis of what it may be hoped to accomplish in normal times, and the outlook before it is unquestionably good.

RUSSIA.

POPULAR COOPERATIVE CREDIT

(*Continued*).

Present position of cooperative credit societies.

Having already examined the historical development of the several types of popular credit institutions, let us now see what is their present state, i. e. ascertain their field of operations, their membership and the distribution of the latter, their assets, liabilities, etc., and thereafter, on the basis of the results brought to light by this enquiry, indicate the tendencies manifested by Russian cooperation.

§ 6. The distribution of cooperative societies in the empire.

The distribution and density of popular cooperative credit institutions varies in the different parts of the Empire. On the periphery the societies are fewer than in the central parts. In Turkestan, for instance, which has an area of 121,231,600 dessiatines, and a population of 5,807,300 inhabitants (1) there were :

in 1909 only 10 Cooperat. credit soc.
» 1911 » 31 » » » and 15 deposit and loan societies
» 1912 » 66 » » » » 28 » » » »

that is, an aggregate, in 1912, of 94 societies.

In Siberia (governments of Tomsk, Tobolsk, Irkutsk, Yenisseisk), which has an area of 503,759,300 dessiatines, with a population of 7,641,400

(1) At 1st January 1913.

inhabitants (at 1st January 1913), there were, in 1912, 22 deposit and loan societies and 308 cooperative credit societies.

During the last few years the cooperative societies have undergone a rapid increase in Siberia, which is connected with the intense activity in land settlement.

In the Caucasus (area 42,950,400 dessiatines, population 12,513,800 inhabitants) there were, in 1911, 333 cooperative credit societies and 153 deposit and loan societies, and 127 agricultural popular credit institutions of a non-cooperative character: in all 613 such institutions. In 1912 the number had gone up to 822 (1).

In the interior of the Empire there are districts in which the density of the popular credit establishments is already very remarkable, and there are others again in which such bodies are rare. The distribution of the districts according to the number of the institutions at the 7th January 1913 appears from the following table :

Number of Institutions	Number of districts having	
	Popular credit institutions of any kind	Cooperative popular credit institutions
Up to 5	122	164
» » 10	149	196
» » 25	242	274
» » 50	175	80
» » 75	37	10
» » 100 and beyond	12	3
No institutions	44	54
Total	781	781

At the 1st January 1914 there were 48 districts without any cooperative popular credit institution, situated principally in the eastern part of Siberia. In European Russia, on the same date, there were 9 districts only without such institutions, 2 being in the government of Vologda, 3 in that of Stavropol, 2 in the territory of Terek, and 2 in the government of Astrakhan.

(1) To give an idea of the two types of credit for the small farmer etc. studied in the April Bulletin, we shall from time to time give data likewise as to non-cooperative credit to small farmers and traders.

§ 7. THE IMPORTANCE OF THE COOPERATIVE SOCIETIES ACCORDING TO THE NUMBER OF MEMBERS AND UNDERTAKINGS JOINING THEM.

Passing on now to the membership of the credit institutions, we find that at the 1st January 1913 it was 7,094,617. The average in the Empire for each cooperative credit society was in

1911	1912	1913	1914	1915
524	564	611	651	682

For the deposit and loan societies the average was :

1911	1912	1913	1914	1915
500	537	575	588	601

This however is not the maximum limit of the number of members. In 1911, in 679 cooperative credit societies (11 % of those existing), and in 300 loan and deposit societies (12 % of those existing), the number of members in each body exceeded a thousand ; and in 66 cooperative credit societies (3 % of those existing) it exceeded 2000, and in some cases went up to 4,000, 5,000 and even 7,000. These are exceedingly high figures, when confronted with which we must ask ourselves whether, in those cases, the principle of *localisation* of the societies was observed ; as they should above all be societies formed among neighbours and in which the special conditions of each member can be easily checked, and each member can know the position of the other members and ascertain it easily. It should furthermore be noted that the administrative gear becomes rather complex in these larger associations. For these reasons the radius of action of co-operative societies should not be extended. If nevertheless the mistake has been made, the reason is partly to be found in the fact that it was difficult to gather sufficient working capital (sufficient deposits) in the rural districts from a small number of members, and partly because, in small cooperative societies, good and expert administrators are hard to find. These two features however are really special to the period of transition, when cooperation is still in the development stage, and they should not be considered as characteristic of Russian cooperation, as has often been done.

If now we compare the number of members of institutions for popular credit with that of the independent rural landowners (owners of a house or an agricultural estate) forming part of the same institutions, it will be seen that the two figures rarely coincide, while, according to the law, this should always happen, because each member of a cooperative society should,

by that very fact, be the head and the representative towards third persons of his own landed property. In actual fact, however, it is found that two members of the same family or of the same undertaking register themselves as members of the same society, appearing as independent proprietors, and committing a serious breach of legal enactments, with the object of increasing the sums to be obtained by loans, because in the deposit and loan funds the loans are granted in proportion to the membership contribution. In this way the number of members is really larger than that of agricultural estate owners (or owners of a farm and a house, as the peasants' phrase goes).

The aggregate number of farms existing in the sphere of action of the popular credit institutions amounted approximately in 1910-11 to 18.5-20 millions, of which only a small part were comprised in those institutions, namely:

In 1910, 36 % in the credit societies;
» 19 % in the deposit and loan societies;
» 35 % in the non-cooperative rural societies.

In 1911 the percentage was a little higher namely:
» 40.5 % in cooperative credit societies;
» 21.22 % in the deposit and loan societies;
» 35.8 % in the non-cooperative rural societies.

In 1912, the percentages were 47, 24.3, and 38 % respectively.

These percentages must however have been slightly below the real ones, because, as often happens, in one single territory there are credit institutions of different kinds, and in this way the number of farming concerns appears greater than it really is in that particular territory. Further, the sphere of action of each institution is not always clearly defined, and the territory fixed in the bye-laws does not always coincide with that in which the institution really developes its operations. Generally, however, it may be said that the sphere of action of each individual institution is always less than a district. The number of independent agricultural undertakings or farms comprised within the sphere of action of the various institutions is very divergent, as will be seen from the following table:

Number of farms	Cooperative credit societies		Deposit and loan funds		Non-cooperative rural societies	
	Number of institutions	Proportion of total number %	Number of institutions	Proportion of total number %	Number of institutions	Proportion of total number %
Up to 250	47	1.1	79	4.4	284	7.0
» » 500	315	7.0	255	14.1	394	9.8
» » 1.000	1,306	29.0	398	22.0	905	22.5
» » 2.000	1,995	44.3	522	28.9	1,697	41.7
» » 3.000	574	12.8	209	11.6	555	13.8
Beyond 3.000	267	5.8	344	19.0	210	5.2
Total . . .	4,504	100	1,807	100	100	100
Unknown . . .	41	—	327	—	—	—
Aggregate total	4,545	—	2,134	—	—	—

From the table it emerges that those credit institutions comprising up to 2000 farms predominate in number.

In 1910 there were in the Empire on an average:

for each Deposit and loan society	2,327	farms
» » Cooperative Credit Society	1,462	»
» » Non-cooperative rural Society	1,265	»

The average becomes in 1911 for the first two classes of credit institutes 2,088 and 1,399, and in 1912, 2077 and 1322 (1).

From these figures it may be inferred that the number of farms for each credit institution district (if the expression is permissible) tends to diminish. This is the same phenomenon which we saw occurring in connection with the number of members. Slowly but constantly there occurs in cooperation a process of contraction, a centripetal movement, which is not only in consonance with the fundamental idea of cooperative societies but corresponds even better to the correct practice of popular credit institutions.

Up to now there have been given the absolute figures of members, undertakings (farms) and cooperative societies. Of greater interest are the relative figures, that is, those expressing the ratio to the credit institutions, and the total number of farming properties, existing in the Russian Empire, which would afford the means of ascertaining how great has been the influence and the economic potentialities of the credit institutions.

(1) Particulars as to the third class are wanting.

*
* *

These figures are contained in the following table :

Institutions	1905			1908		
	Number of farms in the Empire	Number of members of institutions	%	Number of farms in the Empire	Number of members of institutions	%
Cooperative	—	564,200	2.1	—	1,383,700	4.9
Non-cooperative . . .	—	1,776,200	6.8	—	2,039,800	7.4
Total . . .	26,178,200	2,340,400	8.9	27,720,900	3,423,500	12.3

Institutions	1911		
	Number of farms in the Empire	Number of members of institutions	%
Cooperative	—	3,447,000	11.6
Non-cooperative	—	2,130,900	7.1
Total . . .	29,803,500	5,577,900	18.7

The total percentages at the 1st January are :

1913	1914	1915
30 %	33.6 %	37 %

From the percentage of 8.9 % in 1905 there is an upward stride in the period of 10 years to 37 % of the total number of agricultural properties existing in the Empire ; these figures speak for themselves and require no comment.

§ 8. The social and economic condition of the members.

Coming now to the composition of the group of members, it should be noted that though they do not appear to be a homogeneous mass, there are nevertheless no great differences encountered in their economic condi-

tion. The principal nucleus is made up of the agricultural population, the peasants. Indeed the institutes which are without any peasant member are very rare.

The commercial class only appears in the city deposit and loan societies, especially in the Polish provinces, where it amounts to 18 or 20 % of the total number of members.

The workmen and the *kustary* (those engaged in cottage industries) are limited to certain regions. The so-called unproductive classes (persons in the service of the State, the commune or the like) are a very low percentage, ½ to 1 ½ %, but of course in cities the percentage is higher. It is impossible to value too highly the importance of the participation in cooperative societies of the more cultured elements of the so-called unproductive classes (masters, land surveyors, parish priests).

Unfortunately in many regions such participation is still small, which is to the detriment of the credit institutions and the agricultural population. Women at the head of agricultural property are also numbered among the members of credit institutions, and according to an enquiry held in the governments of Samara, Bessarabia and Kherson, their number was from 1.6 to 3 % of the total membership.

As regards the economic condition of the members it must be remarked that the great majority is made up of small and medium landowners.

The estates are divided along a scale running from those « without cattle » and « without sown fields » to the very largest, with a vast sown area and numerous cattle.

Farms of 25.50 up to 60 dessiatines of cultivated fields and supplied with complete machinery and animals for working the fields are not rare.

The following table shows the proportion among the various groups of farms and their aggregate number :

	In 38 governments — %	In the central governments — %	In the Empire — %	In the industrial governments — %
	1904-1906		up to 1910	
Farms without draught horses.	34.4	29.1	12.4	14.1
» with 1 horse	37.6	52.6	27.6	54.9
» » 2 horses	20.4	14.9	32.4	22.1
» » 3-4 horses.	6.3	3.1	18.0	7.8
» » 5-10 or more horses. . .	1.3	0.3	9.6	1.1
Average per farm . . .	1.08	0.94	2.22	1.3

Only 12.4 % of the farms were without draught animals in 1910.

The most numerous group is made up of farms with 2 draught horses, and an area of 5 to 10 dessiatines.

Only in the Baltic provinces and the Northern Caucasus were there from 56 to 59 % of the members with more than 10 dessiatines of sowing land.

With regard to the milk cattle the most numerous group of farms is that having from 1 to 2 cows, which form 66.6 % of all the farms which were the subject of a special enquiry on the matter.

Corporate bodies are also met with as members of cooperative societies, as for instance cooperative societies of consumers, agrarian societies, rural societies, cooperative societies of producers, and so forth. Particularly numerous in this category are the *zemstvo* Funds or societies which have the right (as we saw in the *Bulletin* for March) according to their bye laws, to extend their operations to corporations also.

Up to now however they appear to have made but scanty use of this power.

§ 9. The liabilities of the cooperative popular credit societies.

Russian cooperative societies operate with the following means :

1) Their own capital,
2) Capital of third parties (individuals or institutions),
3) State capital.

The absolute and relative quantities of these three descriptions of capital and their distribution per member in each of the different types of credit institution are shown by the following table :

Year and description of credit Institution	Capital										
	Own			Outside			Capital supplied by the State			Other liabilities	
	Total (thousands of roubles)	% of total	Per 1 member (roubles)	Total (thousands of roubles)	% of total	Per 1 member (roubles)	Total (thousands of roubles)	% of total	per 1 member (roubles)	Total (thousands of roubles)	% of total
At 1st January 1905											
Cooperative credit Societies . .	467	8.5	2.6	3,624	65.5	20.0	1,390	25.1	7.7	50	0.9
Deposit and loan Societies . .	18,134	32.7	47.4	34,779	62.8	90.8	250	0.4	0.6	2,248	4.1
Non-cooperative rural Societies	26,240	50.8	14.8	25,387	49.2	14.3	—	—	—	—	—
Total . . .	44.811	39.8	19.1	63,790	56.7	27.3	1,640	1.5	0.7	2,298	2.0
At 1st January 1908											
Cooperative credit Societies . .	2,402	9.8	2.9	14,683	59.7	17.6	7,310	29.7	8.7	209	0.8
Deposit and loan Societies . .	23,999	29.4	44.0	54,957	67.2	100.8	659	0.8	1.2	2,142	2.6
Non-cooperative rural Societies	31,003	49.1	15.2	32,185	50.9	15.8	14	—	—	—	—
Total . . .	57,404	33.9	16.8	101,825	60.0	29.7	7,983	4.7	2.3	2,351	1.4
At 1st January 1911											
Cooperative credit Societies . .	9,345	11.6	3.9	53,452	66.2	22.5	16,927	21.0	7.1	1,066	1.2
Deposit and loan Societies . .	38,607	24.4	36.1	113,608	71.8	106.4	2,112	1.3	2.0	3,868	2.5
Non-cooperative rural Societies	35,478	47.4	16.6	38,984	52.1	18.2	385	0.5	0.2	—	—
Total . . .	83,430	26.6	15.0	206,044	65.7	36.9	19,421	6.2	3.5	4,874	1.5
At 1st January 1912											
Cooperative credit Sociéties . .	15,534	1.6	4.6	98,234	66.6	26.6	27,445	20.4	8.2	1,825	1.4
Deposit and loan Societies . .	47,323	22.6	33.9	153,358	73.2	110.0	3,685	1.8	2.7	5,036	2.4
Non-cooperative rural Societies	39,395	45.2	16.8	46,908	53.8	19.9	892	1.0	0.4	—	—
Total . . .	102,252	23.8	14.4	289,500	67.2	40.8	32,022	7.4	4.5	6,861	1.6
At 1st January 1915											
Cooperative credit Societiés . .	24,145	11.3	4.9	136,845	64.2	28.1	49,381	23.0	10.2	3,041	1.5
Deposit and loan Societies . .	56,346	22.1	32.4	184,468	72.3	106.0	8,323	3.2	4.8	6,186	2.4
Non-cooperative rural Societies	41,098	41.9	17.2	54,309	56.1	22.9	2,009	2.0	0.8	—	—
Total . . .	121,589	21.5	13.5	376,309	66.4	41.8	57,713	10.5	6.6	9,227	1.9

This table exhibits the constant increase of all the capital during the course of the 8 years under considerations, and shows us clearly the characteristic economic structure of each type of institution. The societies' own capital is therefore both absolutely and relatively larger in the deposit and loan societies than in the credit cooperative societies, and this is easily explained, remembering that the initial capital of these societies is formed principally by means of members' contributions. It is true that the deposit and loan societies are of older standing than the cooperative societies, but this difference is set off by the more rapid development of the latter ; indeed, during the period 1905-1913 the number of deposit and loan funds rises from 924 to 3053, or more than threefold, while during the same period the number of credit cooperative societies increases from 537 to 7,963, or more than 14 times.

The outside capital (belonging to third persons), i. e. savings deposits and bonds, are in 1905 almost 24 times greater in the deposit and loan than in the cooperative societies, but 8 years later, in 1913, the proportion is reduced to about 1.5. This change must be attributed to the rapid spread of cooperative credit societies, and must also be regarded as an indication of the fact that, though young bodies, they enjoy the confidence of the public. In the aggregate of working capital, however, the outside capital, both in the deposit and loan and in the cooperative credit societies, is at the head of all other capitals.

The funds furnished by the State are also characteristic of the two descriptions of credit institutions, because in the cooperative credit societies they are much greater both absolutely and relatively than in the deposit and loan societies, which is exactly the opposite of what was observed with reference to the societies' own capital.

The aggregate capital of all the credit institutions during the last few years varies as follows :

1st Jan. 1905	1908	1911	1912	1913
roubles	roubles	roubles	roubles	roubles
112,539,000	169,563,000	313,769,000	430,635,000	566,838,000

Adding to these sums the capital of the *zemstvo* funds and *gmine* we obtain the sum of 653 millions of roubles which at the 1st January 1913 was at the disposal of the credit institutions ; from 1905 to 1913 the working capital has therefore been increased fivefold.

Hence the quantity of capital which popular credit institutions, like small streams, gather from every side for subsequent distribution among their members, is undergoing growth. The number of members, however is also increasing and in an even greater measure. Therefore the average amount of capital at present (1913) falling to each farm does not seem large enough, a fact which may be attributed to the relative youth of the cooperative movement.

§ 10. CHARACTERISTIC FEATURES OF THE VARIOUS DESCRIPTIONS OF CAPITAL, REPRESENTING LIABILITIES OF THE COOPERATIVE SOCIETIES.

1. *The capital proper of Russian cooperative societies is divided into:*

Starting capital (which in the deposit and loan funds is represented by the members' contributions),

Reserve funds,

Special capitals.

The starting capital is a guarantee to creditors for the obligations of the societies, and, where it likewise comprises sums secured by loans, must be returned to the creditors, in case of bankruptoy of the society, only after all other debts have been met (deposits, bonds, etc.).

The reserve fund is made up of the profits and other sums and is of great importance in the credit institutions, serving to cover losses ; it may however likewise be used to strengthen the working capital, to meet any losses in the prices of securities held by the institutions, etc.

The special capitals, which are formed in the same way as the reserve capitals, are employed for various purposes, as for instance for collective purchases and sales, for real properties, insurance, for satisfying the economic and agricultural needs of the members, etc. This last object shows that the cooperative societies do not confine their action exclusively to credit, but likewise endeavour, within the limits of possibility, to raise the intellectual level of the members, to offer them something for the mind. The results of these efforts can of course not be indicated in figures, as they do not admit of measurement, but sooner or later, nevertheless, the good effects are observable.

On the 1st January 1912 rhe average of each of these capitals for the deposit and loan funds, cooperative credit societies, and *zemstvo* funds was as follows :

	Cooperative credit societies — roubles	Deposit and loan societies — roubles	*Zemstvo* funds — roubles
Own capital	1,200	1,600	12,200
Reserve capital . . .	500	2,300	2,100
Special capitals . . .	700	1,900	19,800

2. *Third party capitals* (*including those of the State*).

This portion of the liabilities is made up of the savings deposits and the loans contracted by the institution.

As we have seen, the deposits form the principal part in the liabilities of the popular credit institutions. The savings returns in the years 1904-1913 for the different popular credit institutions is as follows :

At 1st January.

	1905	1908	1911	1912	1913
	thousands of roubles				
Cooperative credit societies . . .	3,205	13,330	45,133	75,497	113,476
Deposit and loan Societies . . .	29,915	49,558	105,453	143,576	170,205
Non co-operative Societies . . .	25,366	32,149	38,939	46,718	54,323
Zemstvo funds.	—	0,296	9,157	18,644	28,084
Total . . .	58,486	95,333	198,682	284,435	366,088

As will be seen from this table, the increase of the deposits was very rapid, especially in the cooperative credit societies.

As however the total of the assets and liabilities has grown even more rapidly, the proportion of deposits has thus been somewhat reduced in relation to them. The institutions having no deposits are few, indeed it should be observed that the number of cooperative credit societies without deposits fell between 1905 and 1913 from 24 to 6 %, and that of the deposit and loan funds from 9.4 to 5 %.

The proportion of the cooperative societies having deposits below 1000 roubles is considerable, namely :

22 % of the credit societies,
11 % of the deposit and loan societies,
21 % of the cooperative rural societies.

Although societies of this class are very prosperous, the influx of deposits must none the less be considered insufficient in many credit institutions. Among the causes of this phenomenon there is mentioned also the traditional « stocking » of the peasant, the bank to which he entrusts all his savings, not having too much confidence in the « secrecy » of modern funds and societies as to the amount of the sums deposited. It will take a long time before the practice of hoarding in this way entirely disappears.

Another cause acting in the same direction is the rate of interest paid by the Bank on deposits, which of course determines the rate to be paid by borrowers.

Now if the rate of interest on savings bank deposits is high, credit and advances to members will be dear, but if on the other hand it is low, it will not attract the investor, who will find another employment for his capital.

This is a serious dilemma, particularly for young cooperative societies.

The rate of interest paid in 1910 was :

In cooperative credit societies	7 %
In deposit and loan societies	6 %
In non-cooperative societies	4 %
In Zemstvo funds	4 to 6 ½ %

The « deposit hunting » of cooperative societies and the small number of central societies which can act as regulators between the local ones in this matter contribute to maintain the relatively high rate.

To the real competition which develops between the popular credit institutions there has been added latterly likewise the competition between the latter and the mutual credit societies ; this has occurred in the Baltic provinces, in the Don, Kuban and so forth.

Finally, there is felt in this field likewise the influnce of the State savings banks, which derive their funds from the same sources which supply the popular credit institutions, i. e. small savings chiefly. While however the cooperative societies had 33.1 million roubles in deposits, the State savings banks had more than a thousand millions, which figure is a proof of the absolute and unshakeable confidence of the public, which entrusts its savings to these banks, while it is mistrustful of the popular credit institutions. The lesser inflow of deposits into the cooperative societies however influences the rate of interest. In brief, we have here a series of interacting causes.

The deposits are either fixed for a certain time (one year, rarely longer) or are freely repayable ; the deposits in current account provided by the law of 1914 are not made use of except in the *zemstvo* funds.

Among the depositors, bodies corporate (societies and companies) form a minority ; they are only found in much larger numbers in non-cooperative rural societies and funds (commune funds).

The other portion of outside (local) capital is formed by loans. These however are not of such great importance as deposits. It is the *zemstvos* in particular which, through their funds, have since 1909 provided capital for the cooperative societies. But this action on their part, like that of the State, is of special character, and they cannot be compared with the ordinary loans. In any case the *zemstvos* granted for the formation of starting capital :

In 1910	627,400 roubles
In 1911	862,600 »
or for each cooperative credit society . .	975 »
and for each deposit and loan fund . . .	1,096 »

With the object of increasing the working capital of the cooperative bodies, the *zemstvos* had up to 1912 granted 10.5 million roubles (or 3 % of the total of the capital possessed by these bodies) ; at the 1st January 1913 the sum had grown to 21 million roubles (4.5 %) and at the 1st January 1914 to 32.6 million (6 %).

Other loans contracted by the cooperative societies from private persons to form their initial capital amounted at the 1st January 1911 to 787,000 roubles ; and at the 1st January 1912 to 1 million in round figures.

Those contracted for increase of their capital amounted at the end of 1910 to 9,336,000 roubles, and at the 1st January 1912 to 8,771,600 roubles. From 28 to 36 % of these sums were obtained from private banks and mutual credit societies. In general however it should be noted that the popular credit institutions appear more as creditors than as debtors of these banks ; at least such is the case for the deposit and loan funds, which had in fact in 1911 taken on loan from the banks about 12 million roubles, but were creditors to them for 17 or 18 million roubles.

The rate of interest on this special class of capital is somewhat higher than on deposits, amounting to 8 % for the cooperative credit societies and 7 % for the deposit and loan societies.

* * *

3. *Loans granted by the State.*

The third and last part of the liabilities is made up of the loans granted by the State, which possess an important function for many popular credit institutions, but particularly the cooperative credit societies, in which at the 1st January 1913 they represented 29 or 30 % of the total liabilities.

The aggregate sum granted on loan by the Government to the credit institutions amounted on the 1st January 1913 to 656 million roubles, divided among the different classes of institutions, taking into consideration the body by which the sum was furnished, in the following way :

Class of credit institution	State Bank		Superior Direction of popular Credit		State Savings banks		
	To form starting capital	Short term loans	To form starting capital	To form special capital	To form starting capital	Portion of same for the grant of short date loans	For grain storage places etc
Co-operative credit societies	5,768,600	30,380,500	75,900	348,000	14,370,500	5,436,800	381,500
Loan and deposit societies	—	6,073,300	509,000	60,500	1,860,100	713,400	59,600
Zemstvo funds	—	2,288,300	586,300	10,000	1,012,000	92,800	—
Non-co-operative rural societies	—	706,300	706,200	7,000	672,000	652,100	—
Association of popular credit institutions . . .	—	—	—	20,000	125,000	—	—
Total . . .	5,768,600	39,448,400	1,877,400	445,500	18,039,600	6,895,100	441,100

(*a*) As will be observed from this table, the greater portion of these sums is furnished by the short date loans granted by the Imperial Bank. This source is drawn upon by 94 % of the cooperative credit societies, nearly one half of the deposit and loan societies, 73 % of the *zemstvo* funds and only 8 % of the non-cooperative societies. The reason why the deposit and loan and the non-cooperative societies have not made a more extensive use of this credit is to be found in the fact that they are already amply provided with means, or that they do not think it desirable to contract loans on more stringent terms in order to secure them. The average debt per cooperative institution amounted at the beginning of 1913 to 12 thousand roubles. The repayment of the debts contracted by the popular credit institutions towards the Imperial Bank generally takes place regularly; during the period 1911-1915 only 10 % of the bills of exchange were protested, the percentage in 1912 being only 0.4 %.

(*b*) For the formation of the starting capital the popular credit institutions may address themselves to the Imperial Bank and the Direction of Credit, and to the State savings banks; it should however be noted that the relative importance of these three sources has undergone a displacement, so that the first place, occupied in the past by the Imperial Bank, has been taken now by the State savings bank, while the Imperial Bank engages more particularly in the grant of short date loans. The Direction of Credit grants loans for the formation of the starting capital only to non-cooperative societies. The State savings banks have now been granted power by the law of 1910 to grant loans to every description of popular credit institution for the formation of their starting capital. The results of this law may be clearly observed in the following table, where the growth of the loans granted by the said savings banks to the popular credit institutions is shown :

Year 1st January —	Number of loans —	Total of loans — (roubles)
1911	192	300,000
1912	2,551	5,900,000
1913	5,443	18,000,000
1914	10,512	20,000,000
1915	13,307	28,500,000

The granting of loans on the part of the State savings banks for the formation of starting capital may take place either when the society is started or subsequently, either in order to restore the necessary proportions between the capital and the obligations of the society or for the construction of a grain storage place for the society, or in order to provide the rural population with the necessary implements or cattle, or for any other expense which may demand a long-date loan.

(*c*) For the formation of the special capitals, i. e. those for a special purpose, a fund exists at the « Direction of popular credit » ; the latter had given :

Up to 1st January 1913, 445,500 roubles and at 1st January 1915, 1,249,800 roubles. These capitals furthermore are used for middlemen operations and, in order to fulfil the demand, should be further greatly increased.

The State has during the last few years given a constantly growing aggregate sum on behalf of popular credit facilities. It amounted at 1st January 1913, to 65,600,000 roubles, at 1st January 1914 to 94,800,000 and at 1st January 1915 to 119,800,000

SWITZERLAND.

THE "SWISS PEASANTS' UNION" AND THE "SWISS PEASANTS' SECRETARIATE" DURING 1915.

The 18th annual report of the directing Committee of the Swiss Peasants' Union and Swiss Peasants' Secretariate has been published.

It deals with the work of these two institutions in 1915, furnishes data and illustrations of the results, and finally places before the public the particulars of their financial management for that year.

We review below this important publication, summarising its principal parts (1).

A. *SWISS PEASANTS' UNION.*

§ 1. Position of the union in 1915.

At the beginning of the financial year 1915 the Swiss Peasants' Union numbered 27 sections representing a membership of 191,310 members. During the year a new section has joined the Union, namely "the East Switzerland Federation of Brown-Cattle-Breeders". As compared with 1914, the Union can point to an addition of 8370 members. Towards the end of the year there was another adhesion to the Union, that of the "Federation of Central Swiss Societies for Milk Utilisation", with 3500 members. Its effective admission into the Union however cannot take place until 1916, the Committee of the latter body not having met in the interval.

The Swiss Peasants' Union was represented in 1915 on the following commissions : 1) Swiss central office for exhibitions ; 2) Commercial Conference of Swiss Carriers and persons interested in Goods Traffic ; 3) Board of Directors of the Federal Railways ; 4) Council of the National Swiss Bank ;

(1) N° 53. Dix-huitième rapport annuel du Comité directeur de l'Union suisse des paysans et du Secrétariat des paysans suisses. 1915. Broug. Secrétariat des paysans suisses, 1916, page 96.

5) Administrative Council of the Swiss National Accidents Insurance Office ; 6) Commission for the introduction of Federal Insurance against Illness ; 7) International Commission of Agriculture ; 8) Delegation to the General Meeting of the International Institute of Agriculture in Rome.

§ 2. Measures of an economic character adopted by the union by reason of the war.

In reference to the monetary stringency the Union endeavoured to induce the Federal Council to intervene in the question of the rise of the rate of interest. Under date of the 4th January 1915 the Union handed a detailed report to the Council in question, directing its attention to the fact that the rate adopted by the Federal Loan Bank had not been successful in preventing the issue of 5 % bonds of the Hypothecary (Mortgage) Banks, and that consequently the interest on mortgages would increase proportionately unless the Confederation intervened actively ; for the purpose of attaining the object of preventing an increase of the rate of mortage interest, it would be necessary for the Confederation to take legal steps for the limitation of the rate of interest and restriction of the right to call in the bonds. The Union declared that if the Federal Council did not intervene forthwith, agriculture would be under the necessity of notably increasing the price of its products, it being demonstrable that the rate of interest was quite out of proportion to the yield of the capital and labour invested in agriculture. The suggestions placed in this way by the Union before the Federal Council were productive of no practical result.

In consequence of the increased price of products and in particular owing to the good harvest results, the increase in the rate of interest was less keenly felt by farmers.

Deserving of note likewise is the position taken up — here again in a financial question — by the Union and the Secretariate of Swiss Peasants towards the issue in June 1915 of 5,000,000 francs worth of 6 % bonds by the Columbus Company at Glarus for the purpose of financing some electric concerns in Argentina. At a moment when the Swiss mortgage (hypothecary) Banks were suffering owing to scarcity of money and Swiss agriculture was subject to very great restrictions in reference to exportation, a loan of this kind of necessity seemed out of place. The Peasants' Secretariate was the first to call the attention of the Federal authorities to this fact ; the Union afterwards approved the steps taken by the former in this matter. The measures adopted for preventing the grant of this loan did not however produce the desired effect, because, at the moment when the Federal Council was to have intervened, it had already been concluded ; further as regards the rate of interest the Federal Department of Finance objected that in its view, it could not be fixed by legislative enactment.

More success attended the steps of the Union when it approached the

Government and Army headquarters to secure leave for agricultural workers with the colours and workmen engaged in cheese making and dairying, and also with reference to the treatment of the horses requisitioned by the army, rates of payment of hire for such horses, their depreciation, etc. Together with several breeder's federations, the Union also took steps to secure the exemption of thoroughbreds from requisition, and the payment of indemnification to the owners of requisitioned vehicles.

Confining ourselves here to those instances in which the initiative of the Union and the Secretariate was crowned with some real success, we note the favourable result obtained with regard to the question of the French pasturages in the Jura, on which a large quantity of Swiss cattle are yearly put out to grass, a matter which has already been regulated under the agreement between France and Switzerland of the 23rd October 1912 regarding pasturing of cattle on both sides of the Franco-Swiss frontier. In consequence of the war, however, difficulties arose, in the absence of the necessary guarantees that France would not requisition these cattle for military purposes and that it could return home in the autumn when Alpine pasturing was over. The Swiss parties concerned therefore formed a « Franco-Swiss Alpine Pasturing Secretariate », and together with the Swiss Secretariate, approached the Swiss Government on the matter, with the result that all difficulties were removed, the French authorities having given the necessary assurances ; thus the Alpine pasturing and the return home of the Swiss cattle were effected without any incident.

The Peasants' Secretariate in the early months of 1915 approached the Postal authorities of Switzerland to obtain withdrawal of the restrictions of the rural postal service made at the outbreak of war, and the postal authorities issued orders for the partial restoration of the suspended services.

The Federal Council appointed Dr. Laur as member of the Swiss Economic Supervision Society (S. S. S.).

§ 3. Laws for the prevention of cattle disease, accidents and sickness insurance, war tax and other work.

The draft amendment of the Federal law on the prevention of cattle diseases published by the Federal Council in its message of the 15th March 1915, was also attentively examined by the Union and the Secretariate ; the conclusions in relation to this latter arrived at by the Committee were transmitted to the Commission of the Federal Chambers.

Active likewise was the participation of the Union in the preparatory work for the introduction of insurance against accidents and sickness.

The Union took up a favourable position towards the new war taxes, and contributed to the through success of the vote of the 6th June 1915, by which the Swiss people accepted the proposed law by 452,117 favourable votes as against 27,461 adverse.

Noterworthy likewise are the steps taken by the Union and other in-

terested bodies in approaching the department of Public Economy and other competent authorities with the object of promoting the cultivation of cereals, defending and supporting the interests of industry, trades, arts and crafts, agriculture and the carrying industry, for the development and growth of trade and the sale of cider, the adoption of electric traction on the Federal railways, etc. etc.

§ 4. Information office in reference to prices.

From the report presented by the Office in question to the Swiss Union of Peasants it appears that its programe of work will comprise the following points :

(*a*) The collection, examination and digestion of market reports;

(*b*) Publication of the market review ; information on the position of the market and the prices of agricultural produce ;

(*c*) Preparation of reports on the international market for milk and the products of the cheese industry ;

(*d*) Collection of materials for reports to the International Institute of Agriculture in Rome.

The average circulation of the " Review of Markets " was 79,060 copies ; 68,300 being in German and 10,760 in French. It was distributed as an inset with 11 German agricultural papers and two French agricultural papers. During the course of the year a change was made in the publication of the French journal, which from March 1915 is only published fortnightly. Together with the Review of Markets, the agricultural papers which use it as an inset receive several communications in connection with the increase of prices of food commodities, the production of milk, the exportation of cheese and the cheese trade, the price of wines and the fruit market. At the present time the question of the price of milk and cheese is not calculated to give the Office so much assiduous work as in previous years ; the influence of the market of the world on the determination of the prices charged in the country was almost entirely neutralised by the fact that the cheese trade was monopolised, and as a result of the official fixing of the price of milk and its products. The Secretariate of Peasants and the Information Office took part in the conferences convened with the object of fixing the prices of milk and cheese, supplying useful data and reports prepared from the ample array of documents and facts gathered by the Office in question in the course of many years ; and in this way they contributed to render possible an understanding between the various groups of persons interested.

The Office has supplied much information both in writing and verbally ; it is being used by farmers in a more intense degree every year. It several times published in political newspapers articles on the prices of agricultural produce. The principal results of these statistics in relation to

prices compiled by this Office were, as in previous years, published in the Swiss Statistical Year Book.

With respect to the service of information as to the international milk and cheese product market, we observe that the monthly surveys on this matter were carried out as heretofore. The following organisations collaborated in this service : For *Germany* various provincial and local organisations and private persons : for *Austria* the General Federation of Rural Cooperative Societies in Austria, assisted in this matter by the I. and R. Society of Agriculture ; for *Belgium* the International Federation of Dairies ; for *Denmark* the Royal Society of Agriculture of Denmark ; for *France* various provincial and local organisation and private persons ; for *Great Britain* the Board of Agriculture (forwarding publications) and various organisation ; for *Hungary* the Royal Ministry of Agriculture (Department for the Cheese industry and Alpine economy) assisted by the National Society of Agriculture of Hungary ; for *Italy* the National Union of Cooperative Dairies, local societies and private persons ; for *Norway* the National Committee of the International Federation of Dairies ; for *Holland* the General Union of Dairies of the Netherlands ; for *Sweden* the Secretariate of the Royal Academy of Agriculture ; for the *United States* and *Canada* finally reports and communication were available.

Except for some delay in the arrival of replies from collaborators, occasioned by the war, the service in question proceeded with sufficient regularity. The quarterly reports were handed as usual to the correspondents at home and abroad. The average quarterly circulation rose to 2412 copies in the German language, 1212 copies in the French language, 100 German abstracts of the report, 44 French abstracts of the report, 210 Italian abstracts of the report and 120 English abstracts of the report.

This service of information, the utility of which to the cheese industry of Switzerland is beyond doubt, will be amplified as soon as the return of normal times allows.

To the International Institute of Agriculture in Rome the Union forwarded monthly the usual reports on the state of the principal cultivations, the condition of silkworm breeding, home and foreign trade in cereals, the production of sugar, the provisional and definitive estimate of the cereal, potato, wine and tobacco crops. The monthly communication as to the visible stocks of cereals in the places of storage was prohibited at the beginning of the war, and the same applies to the foreign trade in cereals from November 1915 onwards.

During the autumn an enquiry was held as to the changes which had taken place in the cultivation of cereals and potatoes as compared with 1914. A considerable increase of the area devoted to these cultivations was found. The result of the enquiry was published in the « Paysan suisse » for January 1916.

§ 5. Valuation office.

From the report presented by this Office to the directing Committee of the Swiss Peasants' Union, it is found that the programme laid down by the regulations of the Office contained the following principal objects, in connection with which the work of the Office was developed :

(a) *Preparation of expert reports and valuations on the application of private persons in connection with the redemption of inheritance, property passing by death, purchase of real estate, applications for advances, and injury caused to cultivation.* As in the previous year the greatest number of applications for valuations was presented by private persons.

(b) *Surveys and valuation for loan banks etc : and the State.*

(c) *Surveys and valuations in cases of expropriation.*

(d) *Cooperation in the work in cases of valuation by order of the court, or official valuation.*

(e) *Contributions to scientific work in the department of the science of rural taxation.*

The value represented by the real properties subjected to valuation during 1915 was as follows :

Valuation of properties according to the amount of revenue	Fr.	2,136,000
Valuation of properties according to their commercial value	»	659,000
Valuation of properties on the basis of the value represented by them for the existence of a family . .	»	391,000

The Valuation Office also very frequently acted as an information office and prepared reports on the most varied subjects, among which we may mention in the first place those relating to the rights of inheritance of peasants under the Civil Code. Finally the Office was used as an intermediary for the letting, sale and purchase of property.

§ 6. Information office in matters of accident and sickness insurance.

The work of this Office was directed to the following matters:

(a) *Information supplied on questions relating to insurance against accidents and sickness.*

(b) *Compulsory cantonal insurance.*

(c) *Medical fee tariffs.*

(d) *Enforcement of article 37 of the Law of Insurance concerning the additional subsidy for mountainous regions.*

On this last point the efforts of the Office are directed towards securing such application of article 37 as to ensure to the population of mountainous

regions all the advantages which the legislator intended to provide for them (1).

(e) *Voluntary insurance against accidents.*

§ 7. Balance sheet.

The business transacted, as appears from the accounts of the Swiss Peasants' Union during 1914 was Francs 268.991.58 in point of receipts and Fr. 64,387.53 as to expenditure, which denotes a surplus in hand for 1916 and cash profit of Fr. 4,604.05. The balance sheet of the Swiss Peasants' Union at the 31st December 1915 closed with Fr. 47,075.74.

The increase of assets during 1915 was 10,293.74 francs, which means that the said assets rose from Fr. 39,115.29 in 1914 to Fr. 49,409.03 in 1915.

The « Prices Information Office » had a balance sheet totalling Fr. 38,786.35 ; the « Valuation Office » concluded its year with a balance sheet exhibiting Fr. 3,990.95.

As regards the journal of the Union, we may point out that the « Schweizerische Bauernzeitung » was appended as a supplement to fully 14 agricultural papers, and the « Paysan Suisse » to 5. 12 issues of the paper appeared, with the following circulation :

	Bauerzeitung		*Paysan suisse*	
N° 1	copies	92,850	copies	20,370
N° 2	»	90,150	»	20,370
N° 3	»	81,400	»	20,690
N° 4	»	81,820	»	20,930
N° 5	»	81,770	»	20,760
N° 6	»	82,370	»	20,960
N° 7	»	82,370	»	20,960
N° 8	»	82,370	»	20,960
N° 9	»	82,220	»	20,960
N° 10	»	82,370	»	20,960
N° 11	»	82,520	»	20,960
N° 12	»	85,470	»	20,960

The average circulation of the German edition was therefore 83,975 copies, and that of the French edition 20,820 copies.

The progress of the journal of the Union from the date of its foundation has been as follows :

(1) On this point see the 3rd section of the publication reviewed by us in the issue for April 1915 of the present *Bulletin*, and entitled "L'institution de caisses-maladie rurales. Motifs et propositions. Publication du Secrétariat suisse des paysans N° 47", Broug, 1914.

	Average circulation per issue		
	Bauerzeitung	*Paysan suisse*	Total
	Copies	Copies	Copies
1901-1910	60,645	21,450	82,095
1911-1915	86,020	20,910	106,930
1915	83,975	20,820	104,895

B. *SECRETARIATE OF SWISS PEASANTS.*

§ 1. Programme of operations.

In pursuance of the provisions of the programme of operations traced out for it by the Committee of the Union, the Secretariate of Swiss Peasants during 1915 was called upon to deal, though in a lesser measure than in 1914, with the following matters : *a*) preparatory work in connection with the revision of customs tariffs and commercial treaties ; *b*) investigations in relation to the financial returns of agriculture ; *c*) enquiries in connection with book-keeping by double entry in agriculture.

In 1915 again the statistical data collected as a result of the enquiry into the returns of agriculture served as a basis for the preparation of reports and replies to enquiries. We may mention the report on the estimate of the capital represented by beef cattle and the revenue of agriculture asked for by the Federal Department of Finance with the object of computing the war tax ; the estimate Office of the Swiss Peasant's Union also employed the data in question as a basis for determining the valuation of rural estates or parts of same and agricultural businesses.

§ 2. Other work : economic measures and war tax.

In addition to the above mentioned work, the Secretariate concerned itself with the necessary measures for encouraging home potato growing through the Swiss alcohol monopoly, with questions relating to labour, economic measures rendered necessary by the war, and referred to in the first part of this article, and the war tax.

The Federal Department of Finance had instructed the Secretariate of Swiss Peasants to prepare a report on the valuation of cattle and on the yield of agricultural labour in order to calculate the *war tax*. In studying these questions recourse was had, as already stated, to the result of the enquiries already made by the Secretariate into the returns of agriculture.

The results at which the Secretariate arrived were as follows :

(1) The Secretariate recommends that, for the valuation of cattle, the following average rates shall be used, by way of guiding principle :

(a) *Beef Cattle.*

	For spotted and red breed and for heavy and light individuals of the brown breed	For Héren's breed (Eringervieh)
	Fr.	Fr.
Cows	600	360
Heifers	400	250
Young cattle	200	130
Calves for rearing	70	50
Calves for slaughter	80	50
Oxen	600	370
Breeding bulls	700	430

(b) *Other animals.*

	Average value in francs
Horses	700
Pigs for rearing and breeding	170
Pigs for slaughter	120
Boars	200
Young and sucking pigs	40
Goats	35
Sheep	25
Bees	23

(2) The product ot agricultural labour is in principle to be calculated as follows :

(*a*) For manual labour devoted to agriculture a wage will be fixed on the basis of the table which we give below.

(*b*) There must be added to the wages for the manual labour of the cultivator, allowing for the corresponding figures reproduced below :

(*aa*) The wage for the manual labour of the wife of the cultivator in so far as engaged in agriculture.

(*bb*) The wage for the manual labour of the sons and daughters under age, in so far as they work on the farm in question.

(*cc*) The wages of the women engaged in preparing the food for the employees of the farm. For this purpose there will be reckoned a sum of about 90 fr. per annum per man and 70 fr. per woman.

(*c*) There should not be added to the gain resulting from manual labour an addition in the form of profit on the undertaking, except for farms the assets of which (entire capital invested in the estate without deducting

debts) exceed 120,000 fr. The addition may be calculated at about 1 % of the net assets.

For other farm properties a deduction if anything should be made of the profit arising from manual labour. The average loss sustained by a farm in consequence of the deduction of interest at 5 % on the capital invested in the farm may be said to be neutralised in cases where the wages in the following table are reduced 40 % for small rural estates and 10 to 15 % for medium ones.

(*d*) The average wages for the manual labour of the various members of a family are found to be as follows according to the investigations of the Secretariate :

Persons	Days of work in one year	Reduction of days of work in working days of a man	Taxable revenue of manual labour	
			per day — Fr.	per year — Fr.
Men	330	1	3	1000
Youths from 18–19 years. .	330	0.9	2.75	900
» » 16–17 » .	330	0.7–0.8	2.10–2.40	7–800
» » 14–15 » .	330	0.6–0.7	1.80–2.10	6–700
» » 12–13 » .	330	0.3–0.5	0.90–1.50	3–500
Below 12 years up to . . .	330	0.3	0,90	300
Women and girls above 18 years	330	0.8	2.40	800
Girls from 16–17 years. . .	330	0.7	2.10	700
» » 14–15 » . . .	330	0.4–0.6	1.20–1.80	4–600
» » 12–13 » . . .	330	0.3–0.4	0.90–1.20	3–400
Below 12 years up to . . .	330	0.3	0.90	300

Subsequently, the war tax was fixed for 280 rural properties for which the Secretariate possessed the accounts for the financial year 1914-1915. The result was that 232 such properties, i. e. 80.5 % did not have to pay any tax on financial returns owing to the fact that their return, after deducting 5 % for the capital subject to taxation, was below 2,500 francs. On the other hand, $^{9}/_{10}$ of the farming businesses considered have to pay a tax on wealth. It is certain that not less than 10 % of the farms under consideration are free from the tax on return (income) and from that on wealth.

Following on the tax on wealth, the war tax hits a large number of farmers whose total income from labour and property is less than 2,500 francs. This is true of at least $^{2}/_{5}$ of the farms in question.

§ 3. Balance sheet.

The business turnover of the Swiss Peasants' Secretariate in 1916 rose to 82,350 francs income and the same amount of expenditure, the account in relation to enquiries into the yield of agriculture in 1915 being 22,020 receipts and the same amount of expenditure.

From the balance sheet of the Secretariate at the 31st December 1915, it is found that the assets held by it on that date were Fr. 12.112 as against 12,871 at the 1st January 1916. The diminution of assets was Fr. 759.

Notwithstanding that the Secretariate considerably reduced the work in connection with the returns of agriculture in proportion to its own financial resources and staff, the Union had to come to its assistance with the sum of 6502 francs. In view of the utility of these investigations the Secretariate expects an increase of the Federal subsidy, so that the expenses may be completely covered out of the subsidy in question.

MISCELLANEOUS INFORMATION CONCERNING COOPERATION AND ASSOCIATION IN VARIOUS COUNTRIES.

BRITISH COLONIES.

AGRICULTURAL CREDIT IN THE LESSER ANTILLES. — " The Agricultural News ", Vol. XIV, No. 353. Barbados, 6 November 1915.

A series of legislative enactments testifying to the growing expansion of agricultural cooperative credit operations in the West Indies have been passed successively at St. Vincent, Trinidad and St. Lucia.

The latest in date, promulgated on the 1st October last, provides for the registration of agricultural credit societies of the Raiffeisen type, formed in the island of St. Lucia, and also the encouragement to be given to this form of cooperation, and the financial assistance furnished by the government.

This ordinance is inspired by the measures introduced in the neighbouring island of St. Vincent by a law promulgated in 1913. The provisions of the ordinance and of the law are indeed almost the same. Nevertheless at St. Lucia the Government may grant loans to the above societies up to a total of £ 3,000, whilst at St. Vincent the limit provided is only £ 500. Furthermore the amount of the loan granted to a society for each member is £ 6 at St. Lucia and only £ 5 at St. Vincent.

The ordinance promulgated at Trinidad contains similar provisions.

UNITED STATES.

THE COOPERATIVE SALE OF AGRICULTURAL PRODUCTS IN MISSISSIPPI. — " The National Field " official Organ of the Union of Farmers. Vol. V, No. 9, Salina (Kansas), 6 April 1916.

Thanks to the propaganda work of the College of Agriculture of Mississippi and to the efforts made by the Department of Agriculture in the United States to organise agricultural clubs and ambulatory schools for the purpose of promoting a rational disposal of field produce, cooperative sales operations in Mississippi assume growing importance.

Since the 1st July 1915, 77 associations and cooperative clubs have been founded. Cooperation thus provides the small farmer with a market for the produce which he could not sell formerly, the quantity being too small for him to find a buyer.

Last year the cooperative dairies of that State distributed half a million dollars to farmers in the form of dividends or refunds. The cooperative sale of sweet potatoes and ordinary potatoes amounted in 1915 to three or four hundred wagons originating from 25 or 30 localities in Southern Mississippi. In addition to this, consignments of Irish potatoes left 15 or 20 localities.

The movement for cooperative organisation is manifested in all parts of the State by the formation of cooperative associations for the sale of hay, peanuts, oats, maize, peas, beef cattle, pigs, poultry and other agricultural products. These organisations teach the farmers the value of cooperation ; their action is effectivelly seconded by the numerous young men's and young girls' clubs scattered pretty well everywhere and which contribute to familiarise the country population with the system of joint sales.

The cooperative markets are formed first and foremost by the specialists in the schools of agriculture, who hand over their operation as soon as possible to county agents, and it is the farmers themselves who choose the local managers.

FRANCE.

THE UNIONS (SYNDICATS) FOR MECHANICAL CULTIVATION. — *Journal Officiel*, Paris, 17 April 1916.

The Minister of Agriculture decided last year that a sum of 290,000 francs should be divided among the cooperative cultivation societies, who should purchase machines for mechanical cultivation to work their lands, and, in case of need, the lands of their neighbours. The first subsidy of this kind was granted to a mechanical cultivation union formed in January 1916 at Moussais Saint Maurice, in the district (arrondissement) of Confolens (Vienne)

This union consists of eight members who had an aggregate of 234 hectares to plough. One-third of their lands is of compact clayey character ; the other two-thirds are clayey-slate soils. The compact soils are very difficult to plough ; three pairs of oxen are required to plough 20 ares a day.

The syndicate received a subsidy of 4,000 francs from the Ministry of Agriculture. Owing to this subsidy, the cost of purchase of a 25 H. P. tractor and a three-furrow plough was reduced to 10,600 francs, or an investment of 45 francs per hectare for a machine which will allow of more rapid work in compact soil, the oxen being left in the shed.

We may observe that in addition to the subsidy granted by the Minister of Agriculture, the mechanical plough syndicates can also obtain ad-

vances from the local agricultural credit societies, such as the latter grant to the dairy and threshing societies.

ITALY.

THE "NATIONAL INSTITUTE OF CREDIT FOR COOPERATION" IN ITS SECOND FINANCIAL YEAR. — Istituto Nazionale di Credito per la Cooperazione: (*Ordinary General Meeting of the Participants held in Rome on the 29th March* 1916). Second year. Rome, Casa Editrice Italiana, 1916.

This institution, which arose in 1913, with a view to free co-ordinated action of the chief Italian credit and provident organisations (1) with the object of carrying on advance and credit operations in favour of the various descriptions of co-operative societies and their unions, began its operations on the 1st January 1914. These operations consist essentially in advances granted to the association in the form of current accounts, against transfer of pay orders of public offices and accounts receivable from such offices, and in the discounting, on behalf of the co-operative associations and legally formed unions of societies, of bills of exchange, bankers' drafts and promissory notes. By way of exception the Institute may also grant direct subsidies to those co-operative societies and corresponding associations which have already been admitted to discount, have been in regular operation for at least three years and in a special application give evidence of the reason and period of the loan.

The subscribed capital of the Institute, formed by the contributions of the various participating bodies, amounts to 8,200,000 lire.

The bills of exchange accepted for discount in 1915 numbered 12,582, totalling 42,802,768.57 lire, with an average per bill of 3417 lire, as against 5091 bills of exchange for 16,477,601 lire discounted in 1914. This represents an almost three-fold amount of work carried out with 973 co-operative societies, which work grew more intense month by month, so that the bills held at the end of December last, had risen to L. 11,836,110, from 6,859,364 lire at the 31st December in the previous year.

The said sum is distributed as follows:

Operations secured by transfer of pay orders	6968	for lire	31,469,328.83
Commercial operations	2918	» »	3,594,822.35
Transfers by intermediate institutions . .	1777	» »	4,955,478.91
Direct loans	919	» »	2,783,138.48

(1) Noteworthy are the adhesion of the National Provident Fund for Workmen's Invalidity and Old Age (2 millions), the Bank of Italy and the Cooperative Societies' Credit Institute of Milan (1 million each), and various ordinary savings banks and popular banks. For the origin and regulations of the National Credit Institute for Cooperation, see our article in the *Bulletin* for the month of December 1913.

According to the nature of the co-operative societies, the direct loans and the operation of discounts of commercial bills are divided as follows :

	Direct Loans		Commercial bills	
	Number effected	Amount — Lire	Number of Bills	Amount — Lire
Cooperative associations of producers . . .	264	478,598.49	702	1,122,062.01
» of consumers	177	617,320.00	703	817.555,00
Agricultural Cooperative Societies	317	1,352,655.94	280	486,312.00
Cooperative Building Societies	109	288,514.05	210	280,005.95
» Advance Societies.	13	12,000.00	976	852,021.24
Miscellaneous Cooperative Societies	39	34,050.00	47	35,966.15
	919	2,783,138.48	2918	3,594,822.35
Against a total in 1914, of . . .		328,140.18		1,723,534.81

As regards agricultural co-operative societies, the Directing Board of the Institute in its above report expresses itself as follows about them : « We have encouraged the endeavours now being made by agricultural co-operative societies with the object of undertaking the cultivation of rented lands and giving continuous work to the members. 74 of these societies have been subsidised by us, and have thus been able to avoid premature sales of produce at inadequate prices to the usual speculators. Particular consideration and study is deserved from the point of view of the part played by " credit " or facilities in the shape of advances, and from the social point of view, by these new forms, introduced in some regions, of *co-operative associations for collective renting or farming*, which, if they spread, might by an intensive system of cultivation, exert a beneficial influence on the national economy, both by the employment of a large number of labourers and by reason of the tranquil state of mind, an essential condition for moral progress, produced in the latter by the stable character of the work ».

According to the various regions to which the co-operative societies belong, the said operations are subdivided as follows :

	Transfer of Pay Orders		Direct-Loans		Commercial bills	
	Number	Amount — lire	Number	Amount — lire	Number	Amount — lire
Piedmont	228	694,000.00	14	39,000.00	42	5,9000.00
Lombardy	360	3,246,000.00	188	489,750.00	151	451,550.00
Venetia	585	2,262,127.66	222	657,168.00	318	308,021.93
Liguria	413	4,059,020.87	4	12,000.00	467	535,042.55
Emilia	1235	5,051,719.46	425	1,438,950.28	815	1,203,522.92
Tuscany	1442	2,879,836.97	32	50,479.06	969	735,530.95
The Marches	242	950,000.00	—	—	—	—
Umbria	53	898,000.00	12	26,500.00	12	3,990.00
Latium	2295	10,811,397.66	22	59,291.00	137	280,254.00
Campania	35	180,941.80	—	—	—	—
Apulia	20	170,281.00	—	—	—	—
Calabria	45	180,784.21	—	—	—	—
Sicily	—	—	—	—	—	18,000.00
Sardinia	15	85,219.20	—	—	—	—
	6968	31,469,328.83	919	2,783,138.48	2918	3,594,822.35

Remembering furthermore that almost the whole of the re-discounts allowed to intermediate institutions, for lire 4,955,478.91, was represented by subventions for loans and by commercial bills of exchange, it follows that the total of investments for these two classes of operations yields a figure of more than eleven millions, which were intended for laying in supplies of material, purchasing articles of consumption, and meeting the needs of agriculture and the requirements of co-operative business generally.

A noteworthy increase likewise took place in current accounts and interest-bearing bonds.

The capital paid up at the end of 1915 amounted to lire 5,535,000, that still to be paid to lire 2,665,000, the reserve fund to lire 23,421. The year closed with a profit of lire 201,579.

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THE ACTIVITY OF THE "FEDERAZIONE SICILIANA DELLE COOPERATIVE" (*Sicilian Federation of Cooperative Societies*) in 1915. — Report to the General Meeting of the 2nd April 1916, in *La Cooperazione*, to the organ of the Federation. Girgenti, Nos 1 and 2, March-April 1916.

At the 31st December 1915 this regional Federation having its seat at Girgenti, had been joined by 62 co-operative societies, most of them

agrarian credit societies with 12,901 members. As appears from the report of its General Secretary for the said year, the war has not shaken the solid fabric of the adhering associations: "Though of necessity the work of propaganda by which in previous years the number of co-operative agrarian associations was increased, has been less intense, those already existing have still further consolidated their position and have furnished a magnificent proof of resistance to the by no means slight difficulties created by the dreadful conflict". As to the position of the federated societies at the 31st December last, we reproduce the following summarised particulars: cash and credit deposits L. 324,957; outstanding debts, subsidies and goods L. 2,457,754; real assets L. 2,830,712; deposits received L. 827,756; capital L. 238,980; reserve fund L. 95,661; business turnover L. 3,692,845; profits and losses L. 47,399.

Particular mention is made of the *Cassa Agraria di Aragona* (Aragona Agrarian Society) which in the course of one year raised the number of its members from 412 to 444, and increased its turnover from L. 131,682 to L. 142,327; the *Società Cooperativa Agricola di Cammarata* (Cammarata Cooperative Society of Agriculture) whose members to-day number 130 against 52 at the 31st December 1914; and the assets of which have risen from L. 274 to L. 27,762, with a turnover of L. 28,381; the « Rinnovamento » Agrarian Society of Canicattì, which increased its membership from 315 to 412 and its business from L. 52,203 to L. 60,098, obtaining on the merits of its growing activity, a premium of 1000 lire in the competition opened by the Minister among the agrarian financial societies of Sicily; the *Cassa Agraria Comunale* Communal Agrarian Society) of Grotte, in which the membership has gone up from 298 to 325; the Agrarian Society of Licata, whose assets have risen from L. 12,233 to L. 33,686, membership from 179 to 261, and turnover from L. 17,917 to L. 50,052; the Cooperative Society Limited of Noto, the assets of which had gone up from L. 33,428 to L. 36,934, and which has raised from L. 82,064 to L. 95,370 the amount of the agrarian bills of exchange discounted for its members; the *Cassa Agraria di S. Biagio Platani*, which has rented an ex-feudal estate of an area of nearly 1000 hectares at an annual rent of 21,000 lire, dividing it into parcels of about 40 hectares each, handed over to groups of 5 members each, etc.

Finally the *Azienda-Concimi* (Fertilisers' Purchase Department) annexed to the Federation, purchased for account of the affiliated society 66,567 quintals of superphosphates, at a price of lire 445,702 (1),

(1) For further details on the operations of the said Federation in 1915 and the work it proposes to develop after the war, see the interesting booklet by its General Secretary, Professor Enrico La Loggia: "Pel dopo-guerra in Sicilia" ("After the war, in Sicily") read to the general meeting of members on the 2nd April 1916. Girgenti, Tip. V. Sirchia, 1916.

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STATE CONTRIBUTIONS TO ECONOMIC AND PROVIDENT ASSOCIATIONS. — (*Official Gazette of the Kingdom of Italy*). Rome N° 94, 21st April 1916.

By lieutenancy decree (No. 425) dated 6th April 1916 there were authorised the following extraordinary allocations in the estimates of the Ministry of Agriculture, Industry and Commerce, for the purposes below set out :

a) for State contributions in favour of economic and provident associations (trade unions, mutual and cooperative societies) which have organised services of allowances to relieve the effect of unemployment, Lire 150,000 ;

b) as State contribution behalf of employment offices for labour for the operations which they perform in the province where they are situated and those immediately adjoining, L. 30,000.

By decrees of the Minister of Agriculture the conditions and bases of allocation and payment of the above contributions will be laid down.

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THE "CREDITO CENTRALE DEL LAZIO". — Report of the Board of Directors to the General Meeting of the 27th March 1916. Rome, 1916.

The *Credito Centrale del Lazio* is one of the most important federations of Catholic rural societies, carrying out banking functions and having its seat in Rome. It groups together more than 40 cooperatives societies in Latium. Its position at the end of 1915 appears from the following figures :

Deposits and current accounts L. 5,490,619 ; securities belonging to the institution, L. 812,602 ; re-discounted bills out of those in hand L. 475,353 ; bills receivable in hand L. 3,861,258 ; net profit L. 42,268.

From the report of the Board of Directors we extract the part relating to the work of organisation of the cooperative movement carried out by the *Credito* in Latium.

" As regards our special task of watching over and supervising all the cooperative financial societies which have joined our federation, we must inform you that in 1915 our activity was still more intense than in previous years. All the societies were audited at least once, and while taking steps to put right any deficiency wherever found, we did not fail to point out to the respective boards of management the work of those societies which, by reason of the sound and proper standards adopted, seemed to us worthy of praise.

We facilitated the purchase of agricultural produce by those societies which, under their bye-laws, are able to carry on this class of operations in the interests of their members, taking care that this form of activity should, in view of the exceptional unsteadiness of the market, be confined within the limits of absolute necessity and remote from any suggestion of speculation.

We pressed the federated bodies to afford their entire and effective co-operation towards the thorough success of the national loans, and we must put upon record the truly gratifying success of their action in rural centres.

The continuous progressive development of the small institutions for the provision of financial facilities is a still more striking testimony to the great importance of these modest organisations in the economic life of the nation, and our Institute feels that it is fulfilling its highest function when, with anxious watchfulness, it concerns itself for the attainment of their economic, social and financial objects.

In conformity with the task assigned to us by the Italian Federation of Catholic Rural Credit Societies, we have made it our endeavour, in the southern provinces of Italy, to promote the development and coordination of Catholic co-operative financial organisation, by encouraging the formation of federative centres on a provincial or regional basis.

Meetings were held for this purpose at Cosenza, Bari, Benevento, Reggio Calabria, Salerno and Aquila, all of them with promising results, The federations in these centres are in process of formation, and some already formed. Particular mention should be made of the federation of rural Credit Societies of the province of Cosenza, which, performing its work admirably, may serve as an encouragement and an example of the whole of that action which may in this direction be fruitfully developed in the southern regions of Italy ".

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THE DEVELOPMENT OF COLLECTIVE RENTINGS IN THE PROVINCE OF BOLOGNA. *La Cooperazione Italiana.* Milan, N°. 1188, 21st April 1916.

The action already pointed out by us in the province of Bologna, which has for its object to enable labourers on the land to rent direct, properties belonging to charitable and religious institutions, is proceeding with ever-growing success. Indeed, the Union of Agricultural Societies of the said province which formed in 1911 with 9 societies, in 1915 concluded lease contracts for 31 estates of an area of 3231 *tornature* (1), at a total annual rent of lire 95,580.

For 12 properties the lease began on the 1st November 1915 ; for the other 29 it will start on the 1st November of the present year. It is handed over to various co-operative societies of the provinces. The Union itself further concluded another contract with the Provincial Deputation for 2 properties of 226 tornature, for a total rent of L. 10,300, these properties being in part administered by the Union under stewardship.

As a consequence of the leases concluded, the combined co-operative societies which numbered 9 in 1911, grew to 11 at the end of 1915, and to 16 in 1916. In this work the Union have had to overcome difficulties of various kinds, and to meet the competition of private land farmers. Ne-

(1) The *tornatura* of Bologna is equal to 2080 square metres.

vertheless, "convinced of the high character of its mission, it leaves nothing untried, in order to extend still further its sphere of influence in the interests of peasant land labourers".

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THE ACTIVITY OF THE PRINCIPAL COOPERATIVE SOCIETIES OF CONSUMERS IN 1914 AND 1915. — *La Cooperazione Italiana*. Milan, No. 1176, 28th January 1916.

In the following table we indicate the amount of the sales made in Italy in the years 1914 and 1915 by the principal co-operative Societies of consumers:

Name of Society	Place	Amount of Sales in the years		Difference by increase
		1914	1915	
		lires	lires	lires
Italian Association of Consumers Societies	Milan	1,431,276	2,100,000	668,724
Co-operative Alliance	Turin	17,333,000 [1]	14,343,000	4,010,000
Co-operative Union	Milan	10,887,895	13,835,503	2,947,608
Military Union	Rome	7,568,106	14,847'557	7,279,451
Railway Suburban Co-operative Consumers' Society	Milan	4,226,004	4,667,815	441,811
Co-operative Union of Consumers'	Florence	2,993,488	3,560,000	566,512
Carnica Co-operative Consumers' Society	Tolmezzo	1,265,000	2,800,000	1,535,000
General Co-operative Consumers' Warehouse	Imola	1,036,000	1,200,000	164,000
Total		39,740.769	57,353,875	17,613,106

(1) The figure is approximate, as the Society closes its balance sheet at the 30th April. This figure is inferred proportionately to the increase of sale in the 8 months of operation from 1st May to 31st December 1915, which totalled L. 8,890,000 as against L. 6,380,000 during the same period in the previous year.

In all the co-operative societies considered, therefore, there was in 1915 a noteworthy increase of sales over 1914. The biggest increase was in the case of the Co-operative Carnica of Tolmezzo, it being equal to 55 % over the previous year. Next comes the Unione Militare, with 50 %, the Consorzio Italiano with 31.8 %, the Turin Alleanza with 27 %, the Unione of Milan with 21 %, the Unione of Florence with 16 %, etc.

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THE "NATIONAL ZOOTECHNIC FEDERATION". — *La Mutualità Agraria*. Rome, No. 6, 1st March 1916.

There was recently formed in Rome the National Federations of the organisations having for their principal object the promotion and increase of livestock breeding, called the "National Zootechnic Federation". Its objects are as follows :

a) to encourage the formation of livestock organisations in every part of Italy, co-ordinating their action, supplying them with information and assistance such as may avail to render their work more perfect and efficient ; *b*) to collaborate in the making known of legislative enactments of interest from the point of view of livestock ; *c*) to represent livestock organisations towards the State, and facilitate relations therewith ; *d*) to collect and co-ordinate the requirements of breeders and plead for the acceptance of same by the State ; *e*) to represent the federated organisations at national and international assemblies in relation to agrarian and livestock questions.

All the organisations referred to above may join the Federation. The funds for its operation are provided by contributions of the federated bodies, subsidies from the State and from some other bodies, and receipts if any. The Federation is governed by the meeting of the federated organisations, a technical commission consisting of 9 members, and also a general Council of 11 members elected by referendum, if possible with the qualification of being representative of a region ; the latter will appoint an executive board among the members resident in Rome.

Part II: Insurance and Thrift

ITALY.

1. A NEW BILL BEFORE THE CHAMBER OF DEPUTIES FOR COMPULSORY INSURANCE AGAINST ACCIDENTS IN AGRICULTURAL LABOUR.

SOURCES :

PROPOSTA DI LEGGE DEI DEPUTATI BORROMEO, VENINO E BELOTTI: Per l'Assicurazione obbligatoria degli Infortuni sul Lavoro Agricolo. (*Bill introduced by the Deputies Borromeo, Venino and Belotti: For Compulsory Insurance against Accidents in Agricultural Labour*). Announced to the Chamber of Deputies at its sitting of the 11th December 1915 and read at a sitting in March 1916.

MAZZINI (C. M.): Assicurazione degl'infortuni sul lavoro nell'agricoltura. (*Insurance against Accidents to workers in Agriculture*). In: "Bollettino delle Assicurazioni", Turin, Nos. 4, 6 and 8 to 16-29 February, 16-31 March, 15-30 April 1916.

At the sitting of the 11th December 1915, the Deputies Borromeo, Venino and Belotti submitted to the Chamber a bill for compulsory insurance against accidents in Agricultural labour. Having already set out in a previous article (1), the present position of the question in Italy, and also the resolutions adopted in favour of its solution at recent congresses, we confine ourselves to summarising the principal provisions of the new bill, which, in certain fundamental points, differs materially from its predecessors.

§ 1. THE SCOPE OF THE LAW AND THE SYSTEM OF INSURANCE.

According to this bill, the insurance would cover all persons who had attained the age of 12 and were engaged in whatsoever number on agricultural and forest estates and properties, and were not protected by the law on

(1) See in the *Bulletin* for the month of January last the article: *A draft bill for the extension of Compulsory Insurance to Accidents in Agricultural Labour*. Page 59 et seq.

industrial accidents (1). Therefore persons hired at wages, whether permanently or casually, landowners, farmers, lessees and settlers who perform continuous manual labour on agricultural estates, as well as the wife, children and all relatives of the said person, are included. Included also are the survivors, inasmuch as they receive a total annual remuneration, including payments in kind, of not more than 2,000 lire.

The following are regarded as agricultural and forestry undertakings :

(*a*) the cultivation of the soil and labours connected therewith and accessory thereto, such as the keeping and rearing of animals, the preparation, preservation, conversion and carriage of the produce of the said undertakings ;

(*b*) the carrying on of forestry cultivation and the industries connected therewith and accessory thereto.

The law likewise applies to estates managed directly under stewardship by the State, the Province, the Commune, etc., or when leased out by the latter against a part produce rent of to produce-sharing colonies (2).

The insurance is compulsory, and is effected by and at the expense of the owner of the land, who is always answerable for it in law. He is however entitled to recover ; (*a*) the whole of the amount if the land is let on lease ; (*b*) one half of the amount if the land is let against part produce rent ; (*c*) two fifths of the amount if the land is given to produce-sharing colonies.

If the landowner alters in any way to his own advantage the limits as to distribution of the cost laid down above, he will be liable to a fine not exceeding 2,000 lire.

The insurance covers the cases of accident followed : (1) by death ; (2) by total permanent disablement ; (3) by partial permanent disablement, being the loss of not less than 25 % of working capacity ; (4) by temporary total disablement exceeding 10 and not exceeding 90 days.

(1) Law (sole text) of 31st January 1904, No. 51. This law establishes the obligation of insurance for agricultural labourers when employed : (*a*) in a number exceeding five, on work of hydraulic importance ; on work of regulation of channels, streams and mountain basins etc ; on the work of felling or thinning trees in forests and conveying them to the ordinary places of storage on the banks of rivers and torrents, or close to carriage roads and for casting them from the places of storage into rivers and torrents ; (*b*) in a number exceeding five, on industrial production (olive presses, wine cellars, wine making establishments and the like) in which use is made of machines not driven direct by the workman employing them ; (*c*) in rendering service in any number on machines operated by inanimate agents or at the motors of such machines, when the machines are intended for agricultural use ; (*d*) in working at the guns and other appliances for hail prevention. The great bulk of agricultural work has therefore, it will be seen, remained outside the safeguards of the laws.

(2) All the necessary measures to prevent accidents and protect the life and safety of the above named persons must be adopted by those carrying on agricultural work in the manner laid down by the relevant regulations, subject to fines in case of failure so to do, of from lire 50 to a maximum of lire 2000.

This bill therefore, in contrast to the previous ones (1), likewise contemplates the case of temporary disablement, thus complying with the desire expressed at the IVth Congress of the Federation of Workers of the soil, which was held in Genoa in June 1914.

The insurance premium is fixed in reference to the extent of land and the risks of the various cultivations, and is collected by means of special lists, as in the case of direct taxes.

The compensations granted in case of accident are fixed by each insuring Institute, but the amount shall not be less than :

(1) in case of death, lire 2,000 for men from 18 to 60 ; lire 1,600, beyond 60 ; lire 1,000 for women from 18 to 60 ; lire 800 beyond 60 ; lire 500 for persons of both sexes up to 18 years of age ;

(2) in the case of total permanent disablement, an allowance of 30 lire per month for men, 15 lire for women and for persons under 19 of both sexes, as long as the disablement lasts, being payable in monthly accrued sums ;

(3) in case of permanent partial disablement, a percentage of the allowance specified in clause 2 corresponding to the reduction in working capacity which has supervened ;

(4) in case of temporary disablement, 1 lira per day for men and lira 0,50 for women and persons below 18, from the eleventh day onwards.

Women who are the heads of families and those below 18, who are the supports of their families, are assimilated to men as regards the compensation.

The said minimum compensations shall be revised every 5 years, under such conditions as shall be laid down by the regulations, with reference to variations of wage rate, if any, and the corresponding modifications shall be approved by decree of the Ministry of Agriculture, Industry and Commerce.

§ 2. The insuring institutes.

The insurance against agricultural accidents is exercised, under this bill, exclusively by *mutual regional agricultural insurance societies*, one for each division : in Piedmont, with seat at Turin ; in Liguria, with seat at Genoa.

Such societies shall be bodies corporate and authorised likewise to carry on other branches of agrarian insurance and reinsurance, but through a management different from that of the accidents department.

The bye-laws of the societies, approved by royal decree, shall contain all the rules relating to their operation, and in particular the powers of the general meeting, the composition, appointment and powers of the Board of Directors, and the application of the tariff of premiums and the

(1) See in reference hereto our article above cited, in the *Bulletin* for January last.

classification of risks, the drawing up of balance sheets and formation of reserve funds, the assessment and payment of compensation, etc.

The meeting of each regional mutual insurance society is made up of the number of delegates fixed by the corresponding bye-laws, elected by the provincial Council from among those who directly or indirectly participate in the payment of the insurance premium, namely one half from landowners or farmers and one half among those working the soil on a rent of a proportion of the produce, or settlers.

The meeting shall appoint its own Board of Directors and two auditors.

Side by side with the said Board, each society shall have an *assessment Committee*, consisting of two representatives of the persons subject to the obligation of insurance, elected yearly by the Board of Directors, and two representatives of agricultural labourers appointed in like manner each year by the provincial Council of the province in which the society is located, and presided over by the provincial medical officer of the province.

The assessing Committee is called upon to assess all compensation for permanent total or partial disablement ; and all the accidents as to which any dispute, contention or protest has arisen, either on the part of the society or the insured. The Committee may make interrogatories, enquiries and visits to the spot.

At the place of establishment of each mutual society here is also established an arbitration Commission consisting ; (*a*) of a Court judge designated annually by the first President of the Court of Appeal, as chairman ; (*b*) of the Director of the ambulatory Cathedra of Agriculture, resident in the Commune ; (*c*) of a medical officer of special scientific and professional competency in the matter of workmen's accidents, selected by the two last named.

Neither before the assessing Committee nor before the arbitration Committee is it necessary to be represented by an advocate or attorney, and the corresponding proceedings and deeds enjoy exemption from the stamp and registration taxes and from the tax on judgments.

The working expenses of each regional mutual society may not in the aggregate exceed 10 % of the amount of the premium, unless otherwise resolved by the meeting and specially authorised by the Ministry of Agriculture.

The account of expenditure, accompanied by the reports of the Board of Directors and the auditors, shall be approved annually by the meeting and communicated to the Ministry of Agriculture. When it closes with a debit balance, the latter shall be distributed in proportion to the contributions of each member. If on the other hand there is a credit balance, it shall be appropriated as follows : 25 % to the formation of a reserve fund ; 50 % to the formation of a fund for registration in the National Provident Fund for Orphans of victims of labour accidents ; 25 % at the disposal of the Board, which may, with the consent of the assessing Com-

mittee, allocate it to those families of workers who shall have sustained the greatest injury by the accident.

The tariffs of premiums are fixed from year to year by the Board of Directors, after hearing the auditors and taking into account the technical results of the previous year. A copy of such tariff shall be furnished to the Ministry of Agriculture with a report illustrating and justifying it.

Should the insured think the tariff unfairly applied in reference to the class of agricultural cultivation carried on, and his contentions not be allowed by the Board of Directors, he may make a substantiated application to the Arbitration Commission which, after hearing the parties, shall decide in the last resort.

Each regional mutual society may transfer by way of reassurance up to 50 % of its own risks to the National Accidents Fund, which must accept the same on the basis of special tariffs sanctioned by Royal decree.

Finally, should the regional society be unable to operate or not operate regularly within three months from the approval of its bye-laws, the Ministry may take steps for its dissolution, and the National Accidents Fund shall take over its temporary management with all the powers of the meeting and the Board until the new society operates regularly.

§ 3. Assessment and payment of compensation and other provisions.

The compensation shall be assessed by the Board of Directors of the regional mutual society or its executive Committee by substantiated resolution to be served on the parties interested in such manner as may be laid down by the regulations for the carrying into effect of the law. It shall be remitted by official pay order payable, against receipt of the labourer and the insured, in the communal office of the place of their residence.

Void in law are the obligations contracted for the remuneration of intermediaries who, for a consideration, assist the insured in the assessment or payment of the compensation fixed. Void likewise is any arrangement aimed at evading payment of the compensation or reduction of its amount.

The member, the workman and the mutual society are entitled to ask the assessing Committee to review the consequences of the accident and make corresponding modification of the allowance apportioned.

The workman loses his right to compensation when the accident has been simulated or its consequences fraudulently exaggerated. He furthermore cannot, without just reason, refuse to undergo, at the request and at the expense of the insuring Institute, such treatment as the regional mutual society may deem necessary, and to enter for such purpose any clinic, hospital or other place of treatment. In case of unjustified refusal, the whole or part of the compensation may be withheld, subject in case of dispute, to the award of the assessing Committee, and afterwards that of the Arbitration Commission.

The principal, or person carrying on the industry, is bound to give notice within 5 days of all accidents without any distinction, to the regional mutual society, and of those which are anticipated to last more than 30 days, he must notify the authorities of public safety, on pain of a fine of 50 to 1,000 lire.

Medical men who, in the certificates issued, shall have knowingly exaggerated or attenuated the consequences of the accident, shall be punished with a fine of not less than 200 and up to 2,000 lire, and with suspension of exercise of their profession for one to six months, without prejudice to the heavier penalties provided in the Penal Code.

Finally, all deeds in connection with the law in question are free from taxes of every kind, nor can any tax be imposed on the regional agricultural mutual insurance societies, which shall also enjoy free postal facilities.

§ 4. Some recent resolutions in favour of the legislative solution of the problem.

There is no problem which has been more fully studied and discussed in Italy than that of compulsory insurance against agricultural accidents. Resolutions requiring its legislative solution were recently adopted by the Congresses at Florence and Genoa (1), one held by the Society of Italian Agriculturists, April 1914, the other by the General Confederation of Labour in June of the same year. And still more recently, in February 1916 the Workmen's Accidents Insurance and Aid Promotion Society, assembled at Milan, approved a resolution in which, after reference to preceding studies, the hope was expressed that the solution of the problem would not be further delayed (2). And on the 25th of the same month, there being assembled at Modena the representatives of labour organisations, they " impressed by the multiplication of cases of accident in the agricultural industry, considering that the present law governing the insurance of workmen is not fair owing to the difference of treatment extended to the land as compared with industrial workers " invited the delegates of the organisations forming part of the Superior Council of Labour to exert a " continuous and energetic action in order speedily and definitively to relieve the workers on the land from that state of inferiority in which they are placed by the present law on workmen's accidents ". Finally, at the sitting of the 22nd March 1916 in the Chamber of Deputies on the occasion of the discussion of the agricultural budget and estimates, Sig. Longinotti categorically asked the Government to extend to land workers the law on workmen's accidents and that of the modern Italian institution of " probiviri " (" men of probity " who, in addition to supervising communal administration, deal with commercial disputes).

(1) See as to this the *Bulletin* for January last, pages 67 and 68.

(2) Cfr. *La Cooperazione Italiana*, Milan, No. 1181, 3 March 1916.

We thought it desirable to reproduce these resolutions merely in order to show the burning and urgent character in the country of the question under discussion, and that therefore the draft law above summarised corresponds to a need strongly felt by Italian agriculture. This bill is inspired not only by the discussions which have already taken place in Parliament on various occasions ; but also by the results of the most recent enquiries into the matter and the teachings of experience ; it therefore deserves the utmost consideration.

2. THE NATIONAL MATERNITY FUND.

SOURCES :

LAW OF 17TH JULY 1910, NO. 520, INSTITUTING A MATERNITY FUND IN ROME. REPORT OF THE NATIONAL MATERNITY FUND FOR THE YEAR 1914. In the « Bollettino della Cassa Nazionale di Previdenza », Rome, No 4, July-August 1915.

The National Maternity Fund, a self-governing section of the National Provident Fund, was established by law of the 17th July 1910, No. 520, for the purposes of paying a benefit to workwomen subject to the law of the 10th November 1907 No. 818, on women and child labour, in case of childbirth or miscarriage.

It relates essentially to the workwomen employed in industrial establishments, but likewise concerns agriculture through the group of industries having an agrarian character. Moreover, for several years past the extension of this law has been demanded in Italy to women at work on the land, and the Permanent Labour Committee already expressed itself in favour of the extension of its benefits to women occupied in rice fields. We therefore think it desirable to deal with it briefly here.

The amount of the said benefit is fixed at 40 lire, of which 30 are paid by the Maternity Fund out of its own resources and 10 lire by the State as contribution (1).

(1) In case of death in childbed the benefit is paid entirely to the persons undertaking the care of the newborn child, and in case of death both of the mother in childbed and of the newborn child, it is paid to the relatives living with the mother at the time of the confinement, and who took care of her or the child. In order to guarantee the benefit, the law provides that any agreement intended to evade its payment or cut down its amount is void. It forbids the workwoman also to transfer to others the claim to the benefit and provides that the latter cannot be pledged or attached.

Registration with the Fund is compulsory for all workwomen as above subject to the law on woman and child labour. The annual contribution which must be paid is 1 lire for workwomen from 15 to 20 and 2 lire for workwomen from 20 to 50 years of age. This contribution is payable one half by the employer and one half by the employee ; it must be actually paid in however entirely by the employer, who can deduct the proportion payable by the workwoman from her salary.

In the " Bulletin of the National Provident Fund " (No. 4 for 1915) the accounts are published of the National Maternity Fund for the year 1914. We give a summary of same.

Payment of Contributions. — The annual contributions must be paid in two half yearly instalments (April-September ; October-March). These payments for 1914 amounted to lire 763,674,50, with an increase :

over 1912 of lire 86,307,50
" 1913 " 1,990,00

More precisely, they are divided as follows :

Half-year	Number of Instalments		Amount
	of L. 0.50	of L. 1	
			Lire
October 1912-March 1913	4,054	3,615	5,642.00
April-September 1913	2,896	3,149	4,597.00
October 1913-March 1914	22,543	23,180	34,451.50
April-September 1914	685,902	200,052	393,003.00
October 1914-March 1915	162,452	244,700	325,981.00
Total . . .	677,847	574,751	763,674.50

In the two following tables we give for each class of industry and for each region, the number of firms who effected payment of the contributions for the half-year April-September 1914 and October 1914-March 1915 :

TABLE I. — *Firms who effected payment of the contributions in the half-years April-September* 1914, *October* 1914-*March* 1915 *classified according to class of industry* :

Industry	Number of firms who effected payment of the contributions	
	For the half-year April-September 1915	For the half-year October 1914-March 1915
Agriculture	267	126
Mining and Mineral	218	454
Metal working, metal constructions and engineering construction generally	711	559
Wood working, straw working and kindred industries	432	373
Chemical	432	364
Paper and printing	1.219	1.070
Textile :		
Silk	1.472	1.208
Cotton	544	509
Wool	293	298
Flax, jute, hemp, asbestos, etc.	152	134
Elastic fabrics made of hair, electric wire coverings	12	12
Lace, embroidery, tulle, curtains, tapestry	329	273
Unclassified	574	547
Animal products and residues, clothing, and allied industries :		
Tailoring and millinery	954	783
Corsets and linen	258	200
Cleaning, washing and pressing	347	277
Dressing and finishing of furs, foot wear, working of coral and tortoiseshell, felt hats, umbrellas, fans, etc.	1.068	931
Unclassified	118	102
Food industries	776	627
Sundries	508	420
Seasonal industries	122	74
Totals	11.406	9.341

TABLE II. — *Firms which effected payment of the contributions during the half-years April-September* 1914, *October* 1914-*March* 1915 *classified according to the territorial divisions in which they are situate.*

Territorial division	Number of firms which effected payment of contributions	
	for the half-year April-September 1914	for the half-year October 1914 March 1915
Piedmont	1,926	1,654
Lombardy	4,385	3,701
Venetia	1,088	817
Liguria	543	464
Emilia	759	579
Tuscany	1,282	1,071
The Marches	295	215
Umbria	111	84
Latium	389	299
Abruzzi and Molise	83	52
Campania	323	267
Basilicata	1	2
Apulia	43	28
Calabria	18	14
Sardinia	76	45
Sicily	84	53
Totals	11,406	9,341

The Fund Institution received up to the 31st December 1914 2,755,712 half-yearly instalments and contributions aggregating lire 2,202,726.

These aggregate figures in relation to the year in which the payment was made and in reference to the place where the workwomen are employed are divided as follows:

	For 1912 number of instalments		For 1913 number of instalments		For 1914 number of instalments		Total amount of contributions received for three years
	of 50 cent.	of one lira	of 50 cent.	of one lira	of 50 cent.	of one lira	
							Lire
Northern Italy	293,526	418,564	313,592	468,635	314,900	470,615	1,819,828.00
Central Italy	40,001	66,800	45,495	79,268	43,357	78,503	288,997.50
Southern and Insular Italy	14,673	17,903	18,838	23,819	19,580	25,633	93,900.50
Total	348,200	503,267	379,925	571,722	377,847	574,751	2,202,726.00

Payment of Benefit. — The Maternity benefit which, as we have said, amounts to 40 lire, is paid in two instalments, one in the first week of confinement, the other within 7 days from expiry of the period of rest laid down by the law on women and child labour.

In 1914, the Fund received 31,679 applications for Maternity benefit; as however, at 31st December 1913, there remained 132 applications which had not been dealt with owing to insufficiency of documents, the total applications examined during the financial year were 31,679.

At the end of 1914, out of the 31,679 applications: 29,752 had been admitted and granted for payment; 1,829 had been rejected and 98 were pending until receipt of necessary documents or information.

The 29,752 applications which led to the grant of the benefit in 1914 relate to 28,674 childbirths and 1,078 miscarriages. The applications granted involved an expenditure of L. 1,190,080.

The total number of benefits granted during the three financial years was 59,986 for childbirth and 2,213 for miscarriage.

Investment of the funds. — At the 1st January 1914 the Maternity Fund had a credit in current account with the National Provident Fund of L. 302.991.92. In consequence of the withdrawals and payments for the year, at the 31st December 1914 this credit had been reduced to 44,772 98, with an average amount of 78,872.95, on which the National Provident Fund allowed interest at 4,1406 % being equal to the average interest derived from the investment of its own funds.

Revenue and Expenditure. — The income of the Maternity Fund for 1914 is made up of one half of the contributions received in 1913 for the half year October 1913 to March 1914 (L. 169,907), of the whole of the contributions received in 1914 for half-years in arrears (L. 44,690.50), of the whole of the contributions received in 1914 for the half-year April-September 1914 (L. 930,003), of one half of the contributions received in 1914 for the half-year October 1914 March 1915 (L. 162,990.50), of the interest on th current account with the National Provident Fund (L. 3,265.81); of the sums received as penalties for breaches of rules and the State contribution. The latter totalled L. 1,080,719.93.

The total amount of the administrative expenses for 1914, allowing also for the instalment of redemption of starting costs, proved to be L. 65,521.28, *i. e.* 22,978.72 lire below anticipation. Adding to this the amount of the Maternity benefit paid in 1914, L. 1,190,080, there is a total expenditure of L. 1,255,601.28.

The third working year of the Maternity Fund consequently closed with a deficit on operations of L. 173,881.35, and as, in the second working year 1913, there had already been a deficit on operations of L. 113,875.03, there is for the two years an aggregate deficit of L. 288,756.38, which is a fresh proof of the insufficiency of present receipts, already anticipated when, on first enforcing the law, the necessity was pointed out of speedily modifying its financial bases, suitably reapportioning the amount of the contribution.

The Fund has been able to meet the deficits of the first and second

years owing to having accumulated L. 331,236.46 in the first working year, in which as stated the contributions were received for two half-years while benefit was only paid for one half-year. From the said accumulated sum, after deducting the deficits for 1913 and 1914, a balance was left at the 1st January 1915 of L. 42,480.08, which experience shows to be insufficient to meet the expenses of 1915, so that at the end of the 4th working year the Fund will close with a real and notable deficiency. In order to put matters right the administrative Committee of the Fund recently petitioned the Ministry of Agriculture to issue a legislative measure raising to 2 lire for working girls from 15 to 19 the contribution payable by employers and employees, and increasing to 15 lire the State contribution to each Maternity Benefit.

MISCELLANEOUS INFORMATION AS TO INSURANCE AND PROVIDENT INSTITUTIONS IN VARIOUS COUNTRIES.

CANADA.

REPARATION FOR INJURY BY DOGS TO SHEEP IN THE PROVINCE OF QUEBEC.

Le Journal d'Agriculture et d'Horticulture illustré. Quebec, 15th April 1916.

The Legislature of the Province of Quebec, 1916, has just passed a law modifying the amended Statutes 1909, and amending the enactments in reference to the creation by certain municipalities of an indemnity fund for landowners or tenants who have sustained injury to their sheep.

1) Section XXII of Chapter 2 of title 11 of the amended Statutes 1909 (paragraphs 2956-*c* to 5956-*e*), as enacted by law III George V, cap. 41, section 1, is replaced by the following :

Section XXII-*b*.

On the creation of an indemnity fund for land owners or tenants who have had injury to their sheep.

5956-*c*. 1. The Council of the Local Municipality must pass a Bye-law to the following effect if required by a petition signed by at least 25 resident ratepayers.

The Bye-law shall be passed without delay at the General Session following the receipt of the petition ; or at any other General or Special Session after the ordinary notice required by the law governing the Municipality.

2) The Bye-law shall provide :

a) For the creation of an annual indemnity fund made up of the money received from an annual tax of 1 dollar imposed for each dog and of 4 dollars for each bitch kept within the boundaries of the Municipality. On the production of a certificate from a veterinary surgeon attesting that a bitch has been castrated, an annual tax of 1 dollar only is recoverable from its owner.

b) For the imposing of the above tax payable by the owner or possessor of any dog or bitch kept within the boundaries of the Municipality.

c) For compelling the owner or possessor of any dog or bitch kept within the limits of the Municipality to declare to the clerk treasurer of the Municipality the number of dogs and bitches kept by him, on pain of a fine of 10 dollars recoverable by the Municipality for the benefit of the indemnity fund.

d) For the appointment of one or more competent valuers whose duty it shall be to examine without delay the sheep injured by dogs or bitches and determine the amount of such injury.

e) For the payment out of the special fund thus created of an indemnity equal to $^2/_3$ of the injury caused to sheep by dogs or bitches, according to the report of the valuers, provided that the claim of the owner or possessor is made within a period of three months from the date when the injury was caused ; nevertheless the said Council cannot allow an indemnity of more than 15 dollars for each sheep.

5956-*d*. When a sheep straying on the public road is killed or injured, its owner is not entitled to any indemnity.

5956-*e*. The Municipality may claim in its own name the fine mentioned in sub-clause C of clause 2 of section 5956-*c*. It may also claim before any competent court of civil jurisdiction, the amount of the injury paid to the complainant, and it is substituted ipso jure for any person who has thus received an indemnity, in his remedy against the owner or the possessor of the dog or bitch which caused the damage sustained by such person.

The amount of the fine and the damage must be paid into the reserve fund, out of which the costs will be paid in the event of the Municipality failing in the proceedings it has taken, subject to making up the amount of the costs and indemnities out of the general funds of the Municipality not otherwise appropriated, if the indemnity fund is not sufficient to fulfil the purposes of the present section.

5956-*f*. At the end of the year of taxation, the precise date of which must be indicated in the bye-laws, the unused balance of the indemnity fund of the previous year, as well as the sums resulting from the fines and damages received by the Municipality by virtue of article 5956-*e*, shall continue to form part of the indemnity fund for the following year in case of the bye-law remaining in force, or shall form part of the general fund of the Municipality if the fund is not continued.

5956-*g*. The bye-law mentioned in the present section may be passed every year by the Councils of local Municipalities or contain a clause to the effect that it will remain in force from year to year until repealed.

5956-*h*. Any Municipality or person offending against the present section is, on summary conviction before a magistrate or a justice of the peace having jurisdiction at the place where the offence has been committed, or on penal action before the court of Circuit having jurisdiction, liable, in addition to all other remedies, to a fine not exceeding 10 dollars for each offence.

The Judge in applying the present section may also order the owner or possessor of the dog or bitch which has killed or injured a sheep to destroy such dog or bitch within three days, and may also in his judgment condemn

the offender in default of his complying with the order of the Court within the time above specified. to the payment of a fine not exceeding 25 dollars and costs, or to imprisonment not exceeding 40 days, in default of payment of the fine or costs.

3) The present law shall come into force on the day of its sanction.

UNITED STATES.

HAIL INSURANCE IN THE STATE OF MASSACHUSETTS. — The American Underwriter Magazine and Insurance Review. New York, Bol. XLV, No 3, March 1916, pp. 103-104.

The complete reports of the hail insurance Companies to the Insurance Bureau of the State of Massachusetts exhibit the following results for the year 1915 :

Companies	Net premiums — dollars	Net damage — dollars
Etna	31,274.25	43,016.25
Amer. central	4,028.90	6,230.16
Amer. Newark	139,467.35	241,950.75
Boston	9,504.76	36,123.40
Cologne	7,796.46	10,015.70
Connecticut	16,447.69	24,676.99
Firemen's Fund.	100.00	. . . . .
Fire reassur.	59,009.09	82,265.22
First Bulgarian	89,825.82	103,204.55
First Russian	3,945.97	3,936.71
German Amer.	28,5317.96	292,706.50
German Alliance	4,276.87	5,324.75
Globe & Rutgers	7,718.75	10,284.12
Hamburg	54,022.40	113,842.27
Hartford	1,133,064.80	1,380,263.60
Home.	1,154,247.65	1,152,387.98
Imperial	44,671.80	47,085.59
North America	15,935.36	16,740.12
Jakor	42,022.40	81,315.91
Liv. & Lon. & Gl.	182,913.36	232,008.41
Lon. & Lan.	34,440.54	42,798.00
Mech. & Trad.	34,748.68	82,449.04
Michigan Com.	64.95	. . . . .
Minerva	3,341.34	4,292.44
Moscow	6,313.54	6,298.72
Nat'l, Hartford	64,7413.52	1,146,407.94

Companies	Net premiums — dollars	Net damage — dollars
National Union	60,728.13	89,987.72
Northwest, Nat.	354,868.97	327,789.03
Norwich Union	5,109.61	4,644.82
Orient	33,860.35	43,251.84
People's Nat'l	265,346.21	272,402.57
Phoenix, Lond.	89,224.55	97,823.69
Royal	24,194.45	24,059.63
Russia	73,514.58	94,794.30
Russian Reins	3,945.97	3,936.71
St. Paul	926,084.00	1.114,527.00
Salamandra	34,728.68	81,315.91
Second Russian	15,434.97	32,526.36
Security.	296,380.64	503,116.00
South German	2,250.00	1,940.43
Springfield	188,690.57	271,331.09
Standard Fire	85,412.83	116,823.44
Sterling	203.93	39.06
Swiss Re-Ins	5,965.64	8,650.31
Westchester	9,157.60	6,971.94

ITALY.

IL RISPARMIO ITALIANO AL 30 GIUGNO 1915. — Esposizione finanziaria del Ministro del Tesoro fatta alla Camera dei Deputati nella seduta dell'8 dicembre 1915. (*Italian National Savings at 30th June 1915. — Financial exposition by the Ministry of the Treasury made to the Chamber of Deputies at its sitting of the 8th December*, 1915). Rome, Printing Office of the Chamber of Deputies, 1915.

In the *Bulletin* for February 1913 we reproduced the statement of savings deposits, sums in current account and in interest-bearing bonds, in the hands of the various institutions authorised to receive them, as at the 30th June 1912. We now give the same statement at 30th June 1915 :

Statement of savings deposits, sums in current account and in interest bearing bonds at the 30th June 1915.

Issuing establishments :

Credits in current account bearing interest	649,571,701

Ordinary Loans and Advances Institutions :

Number of existing Institutions	119
Capital subscribed	604,962,410
Capital paid up	588,709,951
Deposits :	
Ordinary and interest-bearing bonds	457,109,278
Cash savings deposited	207,719,011
	664,828,289

Popular Banks :

Number of existing banks	316
Capital subscribed	79,028,657
Capital paid up	77,932,424
Deposits :	
Ordinary, and interest-bearing bonds	197,768,481
Cash savings	385,626,439
	583,394,920

Other Co-operative Banks :

Number of existing Banks	308
Capital subscribed	44,228,465
Capital paid up	43,651,199
Deposits :	
Ordinary, and interest-bearing bonds	123,126,311
Cash savings	304,294,786
	427,421,097

Ordinary Savings Banks :

Savings deposited :	
Depositors credits	2,374,214,741
Deposits in current account and interest bearing bonds :	
Credit of depositors and amount of bonds in circulation	178,225,453
	2,552,440,194

Postal Savings Banks:

Number of bank books	6,295,797
Credit of depositors	1,861,737,720

Pledge Establishments:

Ordinary deposits and interest-bearing bonds	118,348,087
Cash savings	101,689,346
	220,037,423

Rural Banks:

Sundry trustee deposits	96,827,672

Recapitulation:

Ordinary deposits	1,724,149,311
Savings deposits	5,235,282,043
Deposits with rural banks	96,827,672
	7,056,259,026

Italian savings, therefore, at the 30th June 1915, aggregated a total of lire 7,056,259,026, as against 6,490,690,179 at the 30th June 1910. The major part of it (about 4 ½ millions), as appears from the statement set out above, flows to ordinary and postal savings banks. Noteworthy likewise is the total figure of deposits (lire 1,107,643,689) with co-operative societies: popular banks, rural banks, etc., which shows the great confidence placed in these institutions.

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SOME DATA CONCERNING MUTUAL FIRE INSURANCE ASSOCIATIONS IN PIEDMONT. — Mikelli, Guido: Le piccole mutue assicuratrici contro gli incendi. (*Small Mutual Fire Insurance Societies*). In *La Mutualità agraria*, organ of the National Institute for Agrarian Mutual Societies. Rome, N° 7, 10th March., 1916.

There exist as yet in Italy no general statistics of small mutual insurance societies against fires, mortality among cattle, etc. There are merely data for a few regions, prepared either by the "National Institute for Agrarian Mutual Associations" or by private investigators. With regard to mu-

tual fire insurance associations, the most recent and trustworthy data are those published in *La Mutualità Agraria* for the 10th March, 1916. They were collected by Dr. Guido Mikelli, a specialist in matters of insurance. We give them in a brief summary.

Mutual Fire insurance societies in Italy to-day number about 340. Almost the whole of these, namely about 320, are in Piedmont, distributed as follows : Province of Turin, 120 ; province of Alessandria, 60 ; province of Cuneo, 60 ; province of Novara, 15 ; province of Belluno, 1 ; province of Udine, 2 ; other provinces, 10.

The total number of members is reckoned at about 54,500, with an average per society of 160 ; the capital insured amounts to the figure of 410 millions of lire, with an average per society of L. 1,200,000 and an average per member of L. 7520 ; the reserve fund attains an aggregate of about L. 2,500,000, with an average per society of L. 7650.

Subdividing the data collected among the three provinces of Turin, Alessandria and Cuneo, and considering them in relation to the existing societies, the following averages may be ascertained :

a) *Province of Turin :* Number of members 23,000, average per society 135 ; capital insured 212 millions, average per society 1,205,000, per member 9,215 ; reserve 1,200,000, average, per society 7,000. Many mutual societies in this province are of new formation, and very many operate in small rural centres, especially in the Canove region and the Valle d'Aosta, which accounts for the small number of members and the small reserve.

b) *Province of Alessandria :* Number of members 13,000, average per society 160 ; capital insured 78 million lire, average per society 1,000,000 and per member 7,000 ; reserve 350,000 ; average per society 4,350. The reserve is found to be small, as it likewise the average capital per member, because more than 25 societies in the Asti region are arranged on the basis of contributory quotas, and therefore formed among very small landed proprietors, without any reserve capital. There are not wanting, however, excellent old societies, such as Portacomaro and Tiglione.

c) *Province of Cuneo :* Number of members 14,000, average per society 230 ; insured capital 95 million lire, average per society 1,550,000, per member 6,800 ; reserve 890,000, average per society 14,800. In this province the oldest and best organised societies are found ; some operate in the chief towns of the district and important rural centres ; hence the high average of members and the considerable average reserve. In this province there exists the Mutua di Fossano, which is the most important society of all, with 13 millions of insured capital, and those of Racconigi, Carrù, Carmagnola, etc.

Part III: Credit

FRENCH COLONIES.

THE BANK OF MARTINIQUE.

OFFICIAL SOURCE:

RAPPORT SUR LA SITUATION GÉNÉRALE DE LA COLONIE PENDANT L'ANNÉE 1914 (*Report on the general situation in the Colony during the year* 1914).

§ 1. HISTORICAL SURVEY.

The Bank of Martinique was created in pursuance of the law of 30th April 1849 on the indemnity granted to colonists owing to the emancipation of the slaves proclaimed by the decrees of the 4th March and 27th April 1848. Article 7 of that law provided that, out of the revenue on 6 millions at 5 % payable to the dispossessed colonists, $^1/_8$ of the indemnity in the form of income accruing to each colonist of Martinique, Guadeloupe and Reunion should be appropriated for the establishment of a loan and discount bank having the right to issue bank notes secured on the revenue so appropriated. These colonists were to receive shares of the Bank to be created in their respective colony up to the amount of the deduction made from the share in the indemnity.

The law of the 11th July 1851 contained the rules in relation to the Colonial Banks and the articles of the three Banks founded by the law of the 30th April 1849 for Guadeloupe, Martinique and Reunion.

The law of the 11th July 1851 was promulgated in Martinique on the 14th October of the same year but it was not until January 1853 that the Bank was able to begin operations. Its capital was fixed at 3 millions

represented by 150,000 francs of 5 % State revenue and its head office was at St. Pierre.

The Bank of Martinique had, to the exclusion of all other establishments, been granted the privilege for 20 years of issuing in the colony notes payable at sight to bearer. The period of the privileges was prolonged by the decrees of the 11th September 1861 and 8th August 1873 until the 1st September 1874, pending the passing of a law in reference to the Colonial Banks. This law was that of the 24th June 1874 prolonging the privilege of the Colonial Banks for 20 years from the 11th September 1874, and laying down the rules and articles with which the Bank must conform.

Therefore the privilege of the Colonial Banks expired on the 11th September 1894 ; at that date no legislative action having been taken, the Government, by decree, extended the privilege until the 1st January 1896 ; a new decree of the 21st December 1895 was needed to give a fresh extension until the 1st January 1897, which measure has had to be renewed five times since then by decrees of the 13th December 1896, 18th December 1897, 27th December 1898, 28th November 1899 and 9th November 1900.

These various measures were approved by article 16 of the law of the 13th December 1901, which extended for 10 years from the 1st January 1902 the privilege of the Colonial Banks and promulgated the rules and articles to which these Banks must conform.

As the law of the 30th December 1914, which extended the privilege of the Colonial Banks for 2 years from the 1st January 1915, maintained in force the provisions of the law of the 13th December 1901 and the articles annexed thereto, until the 31st December 1915, these are still the documents to which reference must be made, taking into consideration also, as regards the Bank of Martinique, the law of the 31st March 1915. Clause 4 of the articles of 1901 had fixed the head office of the Bank at Saint-Pierre. In consequence of the catastrophe of the 8th May 1902 caused by the eruption of Mount Pelée the establishment was transferred to Fort-de-France ; this de facto situation was made regular by the above law.

§ 2. Organisation.

The management and administration of the Bank are in the hands of a manager and a Board of directors comprising, in addition to the manager, directors and supervisors or auditors, who are present at the Board meetings but have no vote.

Manager. The manager is appointed by decree of the President of the Republic from a list submitting three names drawn up by the Colonial Banks Supervision Commission, and on the report both of the Colonial Minister and the Minister of Finance. The decree of appointment is countersigned by the Colonial Minister. The manager can only be removed from office by a decree of the President of the Republic, on the report of the Colonial Minister. He may be suspended by the Governor of the Colony.

The salary of the manager and his travelling expenses as well as those of his family are fixed by a Ministerial decree of the 23td May 1901 and paid by the Bank.

The manager must be the holder of 20 shares which cannnot be transferred during his continuance in office, and he is entitled to a share of profit after certain appropriations and payments of dividend to the shareholders have been effected.

The manager presides over the Board of directors. He has its resolutions carried out. No resolutions can be carried out unless provided with his signature. He appoints and discharges the employees of the Bank, manages the offices, signs correspondence, receipts and endorsements of bills, drafts or pay orders.

The manager cannot carry on any business or be interested in any commercial enterprise.

No bill or instrument with his signature can be accepted for discount.

Directors. The directors are elected by the general meeting of shareholders. When entering on office each of the directors is bound to prove that he is the owner of 10 shares. These shares must be free and remain inalienable during the continuance in office of the director.

The directors are elected for four years, one fourth of their number being renewed each year. They are eligible for re-election.

Any director who is a debtor to the Bank and fails to honour his own signature is, by that fact, disqualified to continue in office.

The directors, auditors and Government commissioner receive attendance allowances, the amount of which is determined by the general meeting.

Auditors or Supervisors. The functions of the auditor or supervisor elected by the meeting of shareholders last two years. He is eligible for re-election.

He must possess the same number of inalienable shares as the directors.

A substitute auditor is appointed by the general meeting of shareholders.

In case of the elected auditor being unable to fulfil his duties, the substitute will carry out all the duties allotted to him under the articles.

He is bound by the same obligations and enjoys the same privileges, He is apponted for two years, and may be re-elected.

The auditor or supervisor appointed by the Colonial Minister corresponds with the Governor and the Minister. Monthly, and more frequently if necessary, he renders account to the Minister of his supervision.

In case of death, resignation or hindrance, his place may be temporarily filled as a measure of urgency by the Governor of the colony.

The supervisors watch, in particular, over the carrying out of the articles and regulations of the Bank ; they extend their supervision to all parts of the establishment, and have the cash, the books, and the bills in hand of the Bank produced to them ; they propose all such measures as they think expedient, and if their proposals are not accepted they may require them to be transcribed in the book of resolutions. They render

account to the general meeting when held in each year, of the supervision exercised by them.

Their report is printed and distributed with the account presented by the Board of directors.

Operation of the Board of Directors. The administration of the Bank is entrusted to a Board consisting of the manager and four directors.

The Board of directors is assisted by two auditors or supervisors, one appointed by the Colonial Minister, the other elected by the meeting of shareholders.

The treasurer and payer delegated by the Minister of Finance is present at the meetings of the Board of and has all the rights of a supervisor in the character of Government commissioner. In case of the treasurer payer or a special treasurer being unable to attend, the treasurer payer appoints the agent who is to represent him.

The Board draws up all the internal service regulations of the Bank. It fixes the rate of discount and interest, exchange, commission and fees for safe custody, the method to be adopted in the valuation of bullion, coin, and gold and silver generally, merchandise and crops.

It also, within the limits of the articles, authorises all the operations of the Bank and determines the conditions of same.

It selects those commercial instruments which may be accepted in discount, without needing to justify any refusal; it specifies which signatures the notes of the Bank must bear and determines as to the withdrawal and cancellation of these notes.

It authorises every compromise and arrangement, every discharge of mortgage, and every participation in composition with creditors, privately or under court supervision.

It takes care that the Bank carries on no operations other than those provided in its articles, and in the forms specified in the internal regulations of the Bank.

It settles the agenda for general meetings and determines the questions to appear on such agenda for discussion.

It determines the organisation of the offices, the salaries, wages and remuneration to agents or employees, and the general administrative costs, which must be fixed each year in advance, and provides if necessary for the creation of a superannuation fund for the staff.

It looks to the upkeep of the real properties of the Bank, provides for office expenses, furniture and other incidental expenses of management.

Actions at law are conducted in its name by and through the manager.

A minute book of the resolutions of the Board of directors is kept.

The minutes, approved by the Board, are signed by the manager and one of the directors present.

The Board of directors meets at least twice a week at the chief office of the Bank.

It holds extraordinary meetings, besides the cases indicated by clause 34, whenever the manager thinks necessary or whenever requisitioned by the supervisors or either of them.

No resolution is valid without the cooperation of the manager and two directors, and the presence of the Government commissioner or his delegate and one at least of the supervisors, the latter having a consultative voice.

Resolutions are adopted by the vote of the majority of members present; in case of equality the chairman has a casting vote.

The account of operations of the Bank to be submitted to the general meeting on the day of its periodical recurrence is settled by the Board of directors and submitted in its name by the manager.

This account is printed and handed to the Governor of the colony, and each of the members of the general meeting.

General Meeting of Shareholders. The whole of the shareholders of the Bank are represented at the general meeting. The general meeting consists of all the shareholders having held at least 10 shares for 6 months.

All holders of less than 10 shares may join together to make up ten and be represented by one of their number.

Nevertheless no shareholder who is not a French citizen may form part of the general meeting unless he has been resident for at least 5 years in the colony, in another French colony, or in France.

Those entitled to attend the general meeting may be represented thereat by a proxy, who must himself have been a shareholder for at least 6 months; the form of instrument of proxy is determined by the Board of directors.

Shareholders in Europe who desire to be represented at the general meeting must, 50 days at least before the date of the ordinary or extraordinary meeting, cause to be issued to them by the central colonial Bank agency, a certificate of ownership of their shares. They cannot transfer them before the close of the general meeting.

The proxy of a shareholder may be a person who is not a shareholder, if he is invested with the general power of attorney of the party concerned.

Each shareholder shall exercise one vote in respect of every ten shares held, but may never exercise more than 10 votes.

No proxy may, in that capacity, cast more than 10 votes, independently of those possessed by him personally.

The general meeting meets at least once a year, in the course of the month of July. It is convened and presided over by the manager. The three largest shareholders present form the provisional officers of the meeting and appoint a secretary.

The meeting immediately procceds to appoint its definitive officers.

The secretary of the meeting, both provisional and definitive, is elected among the three shareholders who are the officers of the meeting. Account is rendered to the general meeting of all the operations of the Bank.

The administrative accounts for the expired year are submitted for approval; the questions put on the agenda by the Board of directors, either spontaneously or at the requirement of a shareholder made in accordance with the articles, are next brought up for discussion; resolutions are adopted by a majority of votes.

The meeting then proceeds to elect the directors and supervisors. These appointments are by secret ballot, by an absolute majority of votes of the members present. After two ballots, if there is no absolute majority, the meeting decides by ballot between the two candidates who gained most votes at the second ballot. When in this last case the votes cast for each are equal, the senior in age is elected.

The general meeting must consist of a number of shareholders representing at least one fourth of the capital. If the general meeting does not reach this figure, a fresh meeting is convened within one month, and its resolutions are valid, whatever the proportion of capital represented by the shareholders present, but only on the matters which were on the agenda for the first meeting.

Meetings called upon to resolve on alterations of the articles or proposals of dissolution or liquidation of the Bank, are only regularly constituted and valid in their resolutions provided they consist of a number of shareholders representing at least one half of the capital.

An extraordinary general meeting may be convened whenever the Board of directors, on the proposal of one of its members, deems this to be necessary. Such extraordinary meeting may also be convened in various cases provided in the articles, especially when shareholders representing together at least one fourth of the shares have made a request to that effect to the manager or the governor of the colony, and in case of the losses resulting from operations of the Bank having reduced the capital by one-half.

Meetings, ordinary and extraordinary, are convened by individual notices addressed to those entitled to attend, at the addresses given by them in the book of the Bank, and by an advertisement inserted fifteen days at least before the date of the meeting in one of the newspapers of the colony designated for that purpose by the governor. The letters of notice must contain a brief indication of the objects of the meeting.

Any shareholder desiring to submit a proposal to the general meeting must given notice of it, five days in advance, to the Board of directors, which shall hold a summary of the position of the Bank at the disposal of the shareholders at least eight days before the meeting.

No question other than those on the agenda fixed beforehand by the Board of directors can be brought up for discussion.

Employees. The employees are appointed by the manager. They are entitled under the articles to a share in the profits, when certain appropriations and allotments of dividend to the shareholders have been made.

The employees of the Bank of Martinique number thirteen, namely : 1 general secretary, 1 principal cashier, 1 assistant secretary, 2 assistant cashiers. 1 chief accountant, 1 gold and silver accountant, 4 clerks, 2 super numeraries. There are also three experts whose duty it is to value the crops upon which loans are granted.

Official surveillance. The action of the Government is exercised owing to the fact that the treasurer for the colony is Government commissioner

to the Bank, and that one of the auditors or supervisors is appointed by the Colonial Minister.

In addition, the commission of surveillance, appointed by the law of 1851, and maintained by the laws of 1874 and 1901, exercises its supervision over all colonial banks.

The colonial banks are audited at their expense every two years, or more frequently if necessary, by inspectors of the colonies specially appointed for that purpose, to satisfy themselves of the genuineness of the entries. The audit reports are sent to the Colonial Minister.

The colonial inspectors when appointed receive instructions from the Minister of Finance, to whom their reports are regularly addressed.

In the interval between these audits, the Colonial Minister and the Governor, either *proprio motu* or at the requirement of the surveillance commission, may, when they think desirable, have carried out, by such officers as they may appoint, any process of checking and examination of the books, cash and operations of the Bank.

The Minister of Finance may likewise, after previous arrangement with the Colonial Minister, have account rendered to him at any time of the situation of the Bank by an inspector of finance entrusted with a special mission for that purpose. The reports of such inspector are addressed to the Minister of Finance and the Colonial Minister.

§ 3. Operation.

Under article 2 of the law of the 30th December 1911, the capital of the Bank of Martinique is fixed at three million francs. It may be increased or reduced in the event of an alteration being declared necessary, by a resolution of the general meeting of shareholders convened specially for that object, the said resolution being approved by the Government in private council, and sanctioned by decree.

The Board of directors is fully authorised to alienate or pledge, under the control of the Colonial Minister, the securities which form the capital of the Bank.

The capital is divided into 6,000 shares of 500 francs each,

At the 1st April 1915, 4,082 were registered in France and 1,918 in the colony.

The reserve fund of the Bank of Martinique is fixed at the minimum of 1,500,000 francs. Until this figure is reached, there is set aside every half year, out of the net profits realised, the equivalent of 0.50 % of the capital ; a dividend equal to 5 % per annum on the share capital is then distributed to the shareholders. Eight tenths of one half of the surplus are appropriated to the reserve fund.

When the reserve fund has reached 1,500,000 francs, all allocations in favour of this fund cease to be compulsory. Nevertheless an extraordinary reserve fund may be created in order to redeem completely the real pro-

perties and furniture of the Bank, to make up the dividend of the shareholders to 5 % in case of insufficiency of profits, and finally to endow, the case arising, a superannuation fund for employees of the Bank.

At the 30th June 1914, the reserve fund according to the articles reached its legal figure of 1,500,000 francs, and there is an extraordinary reserve of 30,000 francs.

§ 4. Operations of the bank.

Under clause 9 of the articles, the Bank cannot under any circumstances or on any pretext transact other operations than those allowed to it by the articles, namely :

(1) Discounting of bills payable or local bills with two or more signatures. This class of operations is in process of wider development in Martinique. The average balance of the " local bills " account rose from 1,300,000 francs in 1908-1909 to 3,189,000 in 1913-1914. The obligations to pay are very much split up : the 2,330,593 fr. 74 c. outstanding on these bills at the 1st January 1915 was divided among 483 persons liable for payment. The amount of the largest subscriber totalled 130,000 francs. The rate is 6 %.

(2) Negotiation, discounting, purchase of bills or drafts direct or to order on France or abroad. This branch of operations is very widely developed in Martinique, as almost the whole of the drafts drawn by the exporters of sugar, rum and cocoa pass through the hands of the Bank.

Borrowers on sugar cane crops and molasses usually discharge themselves towards the Bank by handing over bills free or with deocuments, drawn on their correspondents in France as the equivalent of the manufactured goods which they forward.

In 1913-14 the amount of non-local paper negotiated was 10,093,075 fr. 22 c., on the following terms :

Sight, at par.
Thirty days sight, 25 centimes per 100 francs.
Sixty days sight, 50 centimes ,,
Ninety days sight, 75 centimes ,,

(3) Advances on obligations negotiable or otherwise. (*a*) Against warrants or goods deposited either in public warehouse or in private warehouses the key of which have been duly handed to the Bank.

These operations are carried out in the form of opening of credit in current account at the rate of 6 % for exported goods and 8 % for imported goods. As there are no public warehouses in Martinique, the security is formed exclusively by the delivery of the keys of private warehouses where the goods pledged as security are stored.

(*b*) By transfer of standing crops. Among all the operations of the Bank this is the most important.

The total of the credits opened amounted for the season 1913-1914 to 4,004,050 fr. as against 3,038,870, fr. in 1912-1913.

The valuation of the crops is made in June-July, when the sugar cane is already six to eight months old. In accordance with the articles there is opened in favour of each borrower a credit in current account the amount of which cannot exceed one third of the estimated value of the crop given as security ; the sums to be drawn are distributed over the months July to January, so as to ensure the necessary resources for upkeep of the plantation until the harvest.

Repayment takes place as and when the sugar cane is cut, which is usually from January to June. At the 30th June the majority of the loans are paid off. There only remain to be recovered a few insignificant sums due from small distillers who manufacture throughout the year for the needs of local consumption.

For the season 1913-1914, 1012 accounts were opened, divided as follows :

Crop transfer accounts in 1913-1914.

Borrowers	Total of credits opened to each class of borrowers	Distribution of credits in francs
8 central factories	1,856,000 fr.	1 of 640,000 1 of 320,000 1 of 220,000 1 of 190,000 1 of 161,000 1 of 160,000 1 of 130,000 1 of 15,000
66 residents delivering their cane to the factories	1,364,100 fr.	1 of 100,000 3 of 80,000 to 90,000 1 of 61,000 7 of 40,000 to 50,000 6 of 30,000 to 40,000 11 of 10,000 to 20,000 4 of 5,000 to 10,000 16 of 1,000 to 5,000 5 below 1,000
26 crude sugar boilers	798,000 fr.	2 of 90,000 to 80,000 3 of 70,000 to 60,000 3 of 50,000 to 40,000 3 of 40,000 to 30,000 3 of 30,000 to 20,000 7 of 20,000 to 10,000 3 of 10,000 to 5,000 1 of 3,300 1 of 250
2 borrowers on cocoa	5,950 fr.	1 of 5,700 1 of 250
102	4,004,050 fr.	

The rate in these operations is 5 %.

Since 1902 advances on crops have always been regularly got in, except in 1904, when the crop had been considerably reduced by the cyclone of the 8th August 1903.

The loss sustained in 1910-1911 is to be attributed to the irregularity in the formation of a company borrowing from the Bank, which irregularity led to its suspending operations.

It should be remarked that in 1904 the proportion of loans still exceeded the limits under the articles ; the conditions under which they are allowed to-day appear to render the Bank safe from all risk.

(*c*) By bills of lading to order or endorsed in due form.

At the rate of 6 % some advances in current account are made on sugar from crops pledged to the Bank and realised for its account by commission agents in France. The advantage of this method is that it ensures to the Bank the whole of the proceeds of realisation and increases its profits by prolonging the period of the advances.

(*d*) By transfers of French Government stock, shares of the Bank of the colony or stocks admitted by the Bank of France as securities for advances.

These operations are likewise carried on in the form of opening a credit in current account at the rate of 6 %.

The balance ranges from 2 to 3,000 francs. Eight ninths are guaranteed by transfers of shares of the Bank.

(*e*) By the deposit of bullion, or gold and silver, coined or otherwise.

Operations of this kind in Martinique are confined to advances of an average amount of 53 francs on jewellery and silverware deposited by the necessitous classes of the population ; these rather resemble pawnbrokers' transactions than banking operations.

At the 1st January 1915, there were 4,572 deposits (pledges), on which 241,536 francs had been advanced at the rate of 8 %.

(4) To undertake for account of private persons, or public establishments, the collection or recovery of the bills handed to it, and pay all pay orders and drafts, and keep without interest the sums paid in by way of deposit. The Bank collects a fairly large number of bills sent from abroad for collection : 1,214 bills for 1,855,641 francs in 1913-1914.

Collections of accounts on behalf of clients residing in the colony are *nil*. On the other hand, the public makes very ample use of the right to deposit its money in the Bank, although no interest is allowed.

The issue of normal receipts is little practised. At the 1st January 1915 the number issued was only 20 for 782,760 francs. On the contrary at the same date there were 209 current accounts having to their credit 1,651,094 francs 94 ; at the 1st January 1914, there were 223 credit accounts showing 1,553,585 fr. 44.

The balance under this head ranges from 1,000,000 to 2,000,000 francs. The total of the sums paid in in 1913-1914 was 28,471,230 fr. 67, that of withdrawals 28,418,732 fr. 26. The average of daily sums paid in is 15 francs ; that of withdrawals 44 francs, representing a daily movement of 192.000 francs.

(5) To receive in deposit, against fee for safe custody. all stocks and securities, bullion, money and gold and silver. These operations are of

very small amount in Martinique. In 1913-1914, 4 deposits were made, of a value of 24,000 francs.

(6) To subscribe all loans opened by the State or the Colony, the participation in the said loans not to exceed the value of the funds paid into the ordinary and extraordinary reserves funds. The Bank has not made use of this right for many years.

Prior to the law of 1901, it could also grant loans to the communes. There is due to the Bank in this respect about 625,000 francs of loans granted, under earlier legislation, to seven communes, the amount of which varies from 600,000 francs to 50,000 francs, at the rate of 6 to 6.51 %.

(7) To receive, with the authorisation of the colonial minister, the proceeds of public subscriptions opened either in the colony or in the mother country. It does not appear that the Bank ever carried out operations of this kind. It is desirable to point out however that the funds of the subscriptions in favour of the sufferers by the cataclysm in Martinique were partly paid in to the Comptoir National d'Escompte de Paris in order to be placed at the disposal of the Governor in the Bank of Martinique.

(8) To issue notes payable at sight to bearer, bill to order or drafts or pay orders. The Bank of Martinique is authorised to issue sight notes payable to bearer for amounts of 500, 100, 25 and 5 francs.

The aggregate of notes issued cannot in any case exceed three times the amount of the metallic reserve in hand.

Furthermore, the aggregate of the notes in circulation for current accounts and other debts of the Bank may not exceed three times the capital of the Bank and the reserve funds, unless the equivalent of the current accounts and other outstanding claims is represented by cash going to increase the metallic reserve. Finally, in order to fix the limit of issues, the decree of the 19th April 1902 must be taken into account, under which the certificates of 3 % Government stock forming the capital and the reserves of colonial banks are valued at 90 francs per 3 francs of income for the purpose of fixing the limit assigned by article 4 of the law of the 13th December 1901 to the aggregate amount of notes in circulation, current accounts and other debts of these establishments.

Let us calculate, allowing for these provisions, the figure which the note circulation of the Bank of Martinique might have reached at the 1st January 1915 :

The capital amounted to	3,000,000	francs
The reserve fund under the articles to	1,500,000	»
The extraordinary reserve fund to	30,000	»
	4,350,000	francs

The amount of payable liabilities might therefore reach : 4,530,000 × 3 = 13,590,000 francs, since furthermore 188,685 francs of French 3 % redeemable Government stock possessed by the Bank represent, at the price of 90 francs, 5,660,550 francs.

Without increasing the metal reserve, which was 1,825,883 fr. 35, the circulation might reach 5,477,000 fr., the other elements of the payable liabilities amounting to 4,978,000 francs. The liabilities payable therefore totalled 5,477,000 + 4,798,000 = 10,455,000 francs, and their possible increase was 13,590,000 — 10,455,000 = 3,135,000 francs.

As however the putting into circulation of 100 francs in note form requires the formation of a metal reserve of 33 francs, the issue could only have been $\frac{3,135,000}{1.33}$ 1.33 fr., or about 2,357,000 francs, because to each issue of 100 francs there would have corresponded an increase of 33 francs of the debt to the Comptoir National d'Escompte, from which cash would have had to be got for it.

The liabilities payable would be made up as follows :

Notes in circulation	5,454,015
Possible issue without increase of metal reserve	22,985
Possible issue with increase of metal reserve, within the limits of the articles	2,357,000
Maximum of issues	7,834,000
Current accounts	1,651,000
Receipts payable at sight	782,000
Dividends payable	9,000
Comptoir National d'Escompte (balance at 1st January)	2,236,000
Cash demanded from the Comptoir National d'Escompte	755,000
Sundry	323,000
Total equal to three times the capital and reserves	13,590,000

At the 1st January 1915, the Bank could therefore have increased the amount of its operations by 2,380,000 francs.

The disproportion between its power of issue and the needs of the country proves that it is working with too high a capital, which might be reduced without disadvantage.

In addition to the sight and bearer notes, the Bank also issues drafts payable at the Comptoir National d'Escompte de Paris, at 30-60 or 90 days from the visa of the central agent of colonial banks, and cheques payable on presentation in all the agencies of the Comptoir National d'Escompte.

In 1913-1914 there were issued 8,456,882 fr. 33 c. worth of cheques and 2,473,655 francs 83 of drafts on the following conditions :

Cheques	1 %
Drafts at 30 days	0.75 %
Drafts at 60 days	0.50 %
Drafts at 90 days	0.25 %

9. Trading in precious metals, coined or not. These operations are of no importance in Martinique : the Bank merely carries on, to a very small extent, the exchange of English and American gold.

The realisation of all these operations entails a considerable movement of funds which total for 1913-1914 :

Incoming	57,399,202.12
Outgoing	54,264,127.87
or in all	111,663,329.99

made up as follows :

Cash	4,283,374.99
Notes	32,696,655
Transfers	74,683,300
Total	111,663,329.99

The profits during the year 1913-1914 are made up as follows :

Income on sundry securities		194,231.68
Exchange		45,339.98
Discount, interest and sundry profits		329,107.71
Gross profits		568,679.37
To be deducted :		
General expenses	108,446	
Sundry	25,638,60	
	134,084.60	134,084,60
		434,594.77
Of which there were distributed :		
To the shareholders by way of dividend (including income tax)		200,000
To the staff ; by way of bonuses		3,076.66
		203,075.66

The balance was carried forward to new account.

Finally, it is not uninteresting to note the amount of the taxes paid by the Bank to the colony.

For 1913-1914, there were paid :

Licence	5,572.80
Tax on note circulation	5,300
Stamp on drafts	2,250.70
Income tax	8,000
	21,123.60

SWITZERLAND.

BUSINESS OF ADVANCES ON MORTGAGE TRANSACTED BY CANTONAL BANKS AND LOCAL BANKS.

SOURCES :

DAS SCHWEIZERISCHE BANKWESEN IN DEN JAHREN 1906-1913, BEARBEITET IM STATISTISCHEN BUREAU DER SCHWEIZERISCHEN NATIONALBANKEN (*Banking in Switzerland in the years 1906-1913. Report compiled by the office of statistics of the National Bank of Switzerland*). Berne, Stämpli and Co. 1915.

STAMPFLI (Dr. Arthur) : Die schweizerischen Kantonalbanken (*Swiss cantonal banks*). Zurich Füssli, 1914.

WETTER (Dr. Ernest) : Die Lokal und Mittelbanken der Schweiz (*Swiss local and Intermediate banks*). Zurich, Füssli 1914.

WEBER SCHURTER (J) : Die schweizerischen Hypothekenbanken (*Swiss mortgage banks*). Zurich, Füssii, 1914.

REPORTS AND BYE-LAWS OF VARIOUS CANTONAL AND LOCAL BANKS.

Our article on "*Swiss mortgage banks*" published in the March issue of the "*Bulletin of economic and social Institutions*" described operations of advances on mortgage as carried on by the Swiss mortgage banks ; it now remains to speak of mortgage loans as practised in the cantonal and local banks, which also invest a large part of their capital in mortgage advances. To this subject the present short article is devoted.

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The value of the mortgages in the 22 *cantonal banks* of Switzerland in 1913 was 1,293,755 fr. against a total of 3,863,000,000 fr. in mortgage loans granted in the same year by all the credit institutions in Switzerland. The increase of mortgage loans granted by the cantonal banks during the last eight years was as shown below (we also give the total amount of mortgage loans granted by all the credit institutions in the same period).

Year		Amount of mortgages in cantonal banks		Amount of mortgages in all the credit institutions in Switzerland
1906	Fr.	767,411,000	Fr.	2,545,265,000
1907	»	830,371,000	»	2,708,966,000
1909	»	890,977,000	»	2,891,482,000
1909	»	947,412,000	»	3,079,294,000
1910	»	1,022,420,000	»	3,305,110,000
1911	»	1,117,862,000	»	3,549,173,000
1912	»	1,218,110,000	»	3,717,647,000
1913	»	1,293,755,000	»	3,863,747,000

These figures show that the mortgage loans granted by the cantonal banks amount to about one third of the whole sum invested in mortgages by all the credit institutions in Switzerland.

At this point a question arises as to the proportion existing between urban and rural land credit in the mortgages granted by cantonal banks. It may be answered that in general the nature of mortgage credit transactions depends upon the economic conditions of individual cantons ; in some banks there is a preponderance of agricultural, in others of urban mortgage loan transactions. In many cantons which are eminently agricultural, the cantonal banks afford the chief or the only source of credit, and in such cases agricultural mortgage loans predominate. On the other hand the continual increase in the value of the mortgages held by banks in industrial cantons indicates the increased importance of these institutions in the urban mortgage market, and is a source of advances by loan on house property. In this connection indeed, we might point to a number of cantonal banks which in this way have facilitated the rebuilding of whole towns. A characteristic example of an institution of this kind is afforded by the cantonal bank of Bâle, a model of a city mortgage bank which encourages building enterprises : its mortgage loans rose from 17,200,000 in 1900, the year of its foundation, to 64,500,000 in 1906, and to 115,600,000 in 1912.

The increase of manufacturing industry in a canton brings with it a change in the nature of the mortgage business transacted by the bank ; a proof of this, for example, is afforded by the growth of the mortgage loan business transacted by the cantonal bank of Soleure. The relative proportion of mortgage capital invested in the five districts which are more especially urban and industrial, and in the other five districts was as follows ;

	1888 — Fr.	1900 — Fr.	1911 — Fr.
Urban and industrial districts	15,142,000	30,863,000	48,425,000
Rural districts	7,854,000	12,155,000	16,367,000

The decisive influence exercised by the nature of the economic life of a canton over the character of the mortgage business transacted by the cantonal bank is explained by the fact that in almost all the cantons it is exceptional for mortgage loan transactions to be permitted on property lying outside the canton. Such permission is, as a rule, only granted in the case of loans made to inhabitants of the canton, and when capital is available for this purpose which cannot be invested within the Canton. But even in such cases transactions are limited to lands adjoining the canton in question.

Some of the banking laws absolutely prohibit mortgage loans on property outside the canton. It is only in special cases, as for instance, in the case of the cantonal banks of Schaffhausen and Thurgau, that mortgage loans may be made on lands in foreign countries.

The compulsory repayment of mortgages by annual instalments is now gradually falling into disuse, and the banks that had previously encouraged and promoted this system are now discarding it in view of the scanty public favour it enjoyed

In a series of laws it is expressly enacted that mortgage advance operations are the most important work of cantonal banks ; in fact, with the exception of the cantons of Berne, Vaud, and Lucerne, transactions of this kind are the principal and most important part of their business.

It must not be supposed however that the three cantons above-mentioned are without mortgage loan banks ; in our previous article on « Mortgage banks » we pointed out the importance of the " Crédit Foncier " to the Canton of Vaud, of the " Mortgage Bank " to that of Berne, and of the « Einzinserkasse ' to that of Lucerne, the first named being a company while the last two are State institutions. It must be added that in the cantons of Berne and Lucerne, besides the two mortgage banks above mentioned there are two cantonal banks which grant loans on mortgages though on a smaller scale than the other cantonal banks, in which, as already stated, mortgage credit has become so important as to be considered their chief business.

Mortgage loans occasionally granted by the cantonal Bank of Berne from 1890 onwards are only advanced accessorily to the general business of the bank.

Of late years the value of the mortgages held by the Bank of Berne has considerably increased, because this institution has absorbed a certain number of savings-banks in liquidation. These now continue working as branches of the Bank of Berne.

The growing importance of mortgage operations generally in the business transacted by the cantonal banks is clearly proved by the following figures showing the percentage of mortgage investments relatively to their total assets during the period 1880-1912 :

Percentage of mortgage investments in the assets of cantonal banks.

1880	1885	1890	1895	1900	1905	1910	1912
38,77 %	37,96 %	38,47 %	42,15 %	43,24 %	45,35 %	49,21 %	48,91 %

In 1913 the value of the mortgages held by these banks amounted to 1,293,755,000 fr. out of a total of 2,872,572,000 fr. or 45.04 % of their total assets.

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It only remains to describe briefly the participation of the *local banks* (Lokal- und Mittelbanken) in Swiss mortgage loan operations.

From the report of the Office of Statistics of the National Bank of Switzerland, on "*Swiss banks from* 1906 to 1913", which is the most recent source of information, it appears that the number of local banks during that period was as follows :

1906 — 97	1910 — 99
1907 — 97	1911 — 96
1908 — 99	1912 — 89
1909 — 98	1913 — 85

These institutions do not all transact mortgage loan business ; several of them (for instance 43 in 1911) do no business of this kind.

The value of the mortgages in local banks in the period 1906-1913 is shown below ;

31 December	1906	Fr. 167,806,000
» »	1907	» 175,466,000
» »	1908	» 187,117,000
» »	1909	» 196,672,000
» »	1910	» 201,745,000
» »	1911	» 210,185,000
» »	1912	» 206,162,000
» »	1913	» 211,650,000

If we consider these figures, not only with regard to the value of the mortgages held by all the credit banks of Switzerland, which rose from 2,545,165,000 fr. in 1906 to 3,862,747,000 fr. in 1913, but also with regard to the value of the mortgages in cantonal and mortgage banks, it is evident that the part taken by these institutions in mortgage loan operations in Switzerland is very small.

Not only is this so, but, viewed within the limits of operations of these establishments themselves, the mortgage loan transactions of Swiss local banks are seen to be confined within relatively modest proportions.

The assets of the local banks in the period 1906-1913 was as follows :

1906	Fr.	1,072,060,000
1907	»	1,108,409,000
1908	»	1,164,405,000
1909	»	1,196,074,000
1910	»	1,302,511,000
1911	»	1,333,524,000
1912	»	1,262,967,000
1913	»	1,191,039,000

The percentage of mortgage investments held by the local banks as compared to their total assets was 17.77 % in 1913, while for the cantonal banks in the same year mortgage loans represented 45.04 %

This does not mean that mortgage credit is not a very important branch of the business transacted by local banks, but in the Swiss mortgage market they are far surpassed by the cantonal banks, most of which give loans on mortgages, by the great mortgage banks, and by the numerous loan and savings-banks, which often invest a large part of their capital in mortgage loans.

MISCELLANEOUS INFORMATION RELATING TO CREDIT IN VARIOUS COUNTRIES.

ARGENTINE REPUBLIC.

THE LAND CREDIT OF BUENOS AIRES AND THE ARGENTINE PROVINCES IN 1915. — *L'Information*, Paris, 21 April 1917.

The dearth in Europe, caused by the war, of commodities of prime necessity furnished by the Argentine Republic has enabled the latter to sell its products at highly advantageous prices. At the same time the population has not deviated from the spirit of economy imposed by the last crisis, and these two factors have exerted an exceedingly favourable influence on the commercial balance of the country. For the year 1915, the excess of exports over imports amounted to 1,655 million francs, while the largest excess in the ten previous years did not amount to one third of that figure (477,688,935 francs in 1912). The financial burdens formed by the loans of the country in Europe being estimated at 950 millions, there still remains, after deducting all charges, a surplus of 705 million francs, a thing hitherto never experienced.

It might be thought surprising that such an influx of capital should not have remedied the last symptoms of the crisis from which the Argentine Republic has been suffering for two or three years. It must not be forgotten, however, that the position to be cleared up was one of many burdens and encumbrances. On the one hand, a phenomenon repeatedly observed in Europe after severe financial crises was observed in Argentina, namely, initiative was wanting, persons possessing capital held back, preferring temporary investments even at reduced rates rather than tying it up in fresh undertakings. This attitude had a two-fold justification in the shape of the European confict and the uncertainty prevailing with regard to the economic changes to be expected after the war.

Nevertheless, though the position of farmers generally has undergone a material improvement, there has been no considerable resumption of work in the towns, where building work continues to be slack and business is still far from brisk.

Furthermore, real property continues to be depreciated and little in demand. For the city of Buenos Aires real property transactions amounted, during the first eleven months of the year 1915, to 252,841,945 francs, a reduction of 96 millions below that of the first eleven months of the year 1914. In 1913, these transactions had amounted to 592,867,453 francs.

Mortgage loans, again, are less in demand, and as the money supply is plentiful, the rate of interest is lower than before the war.

As everything justifies the belief that Argentine products will be as much in demand this year as last year, it may nevertheless be hoped that the real property market will soon become livelier, especially as regards rural property. In the towns, particularly at Buenos Aires, it seems unlikely that activity will be very brisk while the war lasts. The enormous rise in freights continues to hamper the import trade, and the immigration of European population can only be resumed after the restoration of peace.

As regards the *Land Credit of Buenos Aires and the Argentine Provinces* the number of defaulters in the payment of interest is slightly larger than last year, and the Company had to expropriate and take possession of some real property, but the provision for that purpose is kept at a figure exceeding the amount of the interest in arrears, and the real property acquired has been redeemed to such an extent that its disposal cannot, according to all expectation, cause any loss.

During the year 1915, the Company examined 276 applications for mortgage loans, out of which 109, forming a total of 4,954,000 francs, were entertained. The sums lent represent generally less than 36 % of the estimated value of the real property security.

At the 31st December 1914, there were in circulation :

1042 mortgage loans, forming a total of	fr.	43,911,355.00
During the working year 1915, there were repaid 126 loans making together	fr.	4,689,460.00
Which brought down the number of old loans to 116 and their amount to	fr.	39,221,895.00
The loans granted in 1915 having been 109 for a nominal amount of	fr.	4,954,000.00
the total amount of operations was increased, at the 31st December 1915, to 1,025 mortgage loans of a nominal amount of	»	44,175,895.00
There must be deducted from this sum : 1. The partial redemptions of old loans, to the extent of 4,165,302 fr. 45 ; 2. The deferred payments on certain loans, or 18,650 fr.; 3. A transferred share of 400,000 fr.; making, in all	»	4,583,952.45
Which brings up to . .	fr.	39.591,942.55

the actual amount of the mortgages at the 31st December 1915, as against 39,959,201 fr. 95 in the previous year.

All these loans are secured by first mortgage and the estimated value of the mortgaged property shows the average proportion of the sums lent, after deducting redemption, to be less than 37 % of the amount of the security.

The risks are very greatly divided. At the close of the year there were :

826	loans below	50,000	francs.
103	loans between	50,000 and 100,000	francs.
70	loans between	100,000 and 300,000	francs.
23	loans between	300,000 and 500,000	francs.
2	loans between	600,000 and 800,000	francs.

1 loan of 1,000,000 francs part of which however has been transferred to a participator.

The position as to mortgaged real property was as follows :

In the city of Buenos Aires, 756 loans, amounting to. .	fr.	25,662,945.00
In the province of Buenos Aires, 250 loans, amounting to	»	15,695,650.00
In other provinces, 19 loans, amounting to	»	2,817,300.00
Total 1,025 loans, amounting to	»	44,175,895.00
The amount of the interest in arrears was, at the 31st December 1915	»	397,719.95
At the 31st December 1914 it had been	»	351,693.85
Hence, for the year 1915, there was an increase of. . .	fr.	82,026.10

In 1914 the increase had been 109,772 fr. 50.

EGYPT.

THE "CRÉDIT FONCIER EGYPTIEN" IN 1914-1915. — From *La Revue économique et financière*, Paris, 25 March 1916.

The already lengthy period which has elapsed since the outbreak of the war has enabled the managing Board of the Crédit Foncier égyptien to attain to interesting general views in relation to the economic position of Egypt and the general state of the business of the Company.

At the end of 1914, the depreciation of cotton gave rise to very serious apprehension. There were considerable difficulties in the way of realisation of the crop, while the sudden suspension of all credit brought extreme tension into the relations between creditors and debtors. The Board thought it expedient to show particular consideration to borrowers and to allow them fairly long extensions of time. In consequenee the receipts fell, from the 1st August to the 30th November 1914 to £85,000 Egyptian, against £E. 680,000 during the corresponding period of 1913. For the half-year from the 1st August 1914 to the 31st January 1915, the receipts

only amounted to £E. 478,000, as against £E. 1,569,000 in the previous year.

Although below the average of 7,500,000 cantars obtained during the last four years, the 1914 cotton crop nevertheless amounted to 6,878,000 cantars. It is true that the yield per feddan under cultivation was only 3.92 cantars, being one-half cantar less than for the four preceding years, owing to the injury traceable to the boll-worm. The real grievance of landowners however was the price of cotton. In spite of the rise, in itself inconsiderable, which gradually took place, the average selling price was only 12 talaries (1) instead of an average of 18½ as in 1910 to 1914. The cotton and corn crop therefore only yielded £E. 19,715,000, being a depreciation of about £E. 13,000,000.

It is clear that under these circumstances the payments into mortgage establishments necessarily underwent considerable delay. The receipts were however affected by the obligation of the borrowers to refund wholly or in part to private persons and banks the short-date advances of which, in ordinary times, they secured a renewal. Town rents were influenced to a notable extent by the absences due to mobilisation. Finally it should be noted that cotton-growing involves high expenses, which have been increased since the war by the rise in coal. The landowners, being compelled to meet henceforward in cash the bills and expenses for which they previously resorted to credit, kept the necessary available funds ready at hand.

The Government, being anxious to develop the cultivation of cereals, had decided to reduce for 1915 the area reserved for cotton, which thus dropped from 1,755,270 to 1,186,004 feddans. Though the wheat crop was somewhat disappointing, barley, maize, rice and sugar cane were satisfactory, and the general price of agricultural produce began, in the course of the summer, to bring about a considerable improvement in the general position.

With regard to the new cotton crop, the yield of which was of course affected by the reduction of the acreage, it this year again suffered severely in several parts from the attacks of the worm, which always remains a subject for anxiety. It benefited however by a remunerative price and sustained demand, owing to which many engagements were met. Finally the business caused by the presence in Egypt of considerable military contingents cannot be overlooked as a favourable element from the economic point of view.

Thanks to these factors of improvement, and in spite of the difficult and uncertain start, the year 1914-1915 has during the last quarter benefited by returns which seem to be the forerunners of a reversion to a more normal situation. The receipts in respect of annuities and arrears of interest amounted during the year to £E. 1,653,000 against £E. 1,731,000 in 1913-1914 and £E. 2,232,000 in 1912-1913. We may add that from the 1st September 1915 to the 31st January 1916, in five months only,

(1) The value of a *talari*, at par, is only 5.1847 francs.

four of which are comprised in the current financial year, there were received £E. 1,483,326 in respect of annuities in arrears.

The position as regards arrears at the 31st October 1915 nevertheless shows the latter to be at a high figure: £. E. 2,845,426 against £E. 2,001,325 at the 31st October 1914, or in francs, 73,763,487 instead of 61,881,399 francs.

Having given these explanations, we have nothing to add to the comparison of the results of the last two financial years as they appear from the balance sheets:

ASSETS:

		31 October 1914	31 October 1915
Shareholders	fr.	100,000,000	100,000,000
Mortgage loans — At long date	»	684,602,976	653,428,074
Mortgage loans — At short date	»	9,854,715	6,591,791
Mortgage loans — By real property sales	»	4,671,613	4,712,807
Mortgage loans — By credits opened	»	7,992,179	7,572,886
	fr.	707,121,483	672,305,558
Loans in process of granting	fr.	261,911	483,507
Third parties for real property allotted	»	14,475,206	11,537,482
Real property acquired by expropriation	»	16,209,498	27,555,062
Real property purchasers	»	269,829	—
Loans on securities	»	2,580,853	2,567,352
Interest accrued but not due	»	38,472,461	40,964,510
Annuities due — Prior to financial year	»	14,476,036	26,451,275
Annuities due — During financial year	»	37,405,363	47,312,212
	fr.	51,881,399	73,763,487
Business premises	fr.	1,279,336	1,279,336
Sundry bills and securities	»	6,659,240	15,524,274
Accounts at bank and with correspondents	»	10,103,382	20,660,783
Cash in hand	»	317,430	68,147
Sundry	»	2,092,023	2,722,009
	fr.	951,724,061	969,431,507

LIABILITIES.

		31 October 1914	31 October 1915
Capital	fr.	200,000,000	200,000,000
Bonds in circulation	»	637,382,936	635,323,366
Bonds repayable; interest and dividends payable	»	8,900,731	18,851,918
Provision for redemption of bonds	»	17,205,642	18,370,669
Reserve fund: Reserve fund according to articles	fr.	7,438,273	7,735,804
Reserve fund: Extraordinary reserve fund	»	25,165,860	25,165,860
Reserve fund: Provision for reduction of premium on bonds, the case arising	»	14,890,903	14,890,903
Reserve fund: Provident fund	»	6,026,396	6,250,014
	fr.	53,531,432	54,042,581
Deferred payments on mortgage loans	fr.	1,318,867	581,373
Annuities received in advance	»	358,456	447,090
Interest payable accrued but not due	»	9,406,828	9,114,352
Sundry	»	5,591,617	4,694,953
Provision for redemption of real estate	»	4,635,747	10,697,895
Provision for losses of interest on annuities in arrears	»	6,709,146	7,628,829
Profits and losses	»	5,682,659	9,678,481
	fr.	951,724,061	969,431,507

During the financial year just expired, the Crédit Foncier égyptien granted 123 loans of a total of 13,400,131 francs. Redemption and repayment in advance amounted to 48,216,056 francs. Finally, there was a reduction in the total of loans of 34,815,925 francs.

The real property acquired by expropriation increased by 11,345,564 francs.

The loan on securities represents an advance made to the *Land Bank* of Egypt against the delivery of 8,617 bonds of that Company.

The items of the liabilities call for no particular comment.

FRANCE.

THE "CRÉDIT FONCIER DE FRANCE" IN 1915.

The year 1915 ran its entire course in unprecedented conditions for the *Crédit Foncier de France*. While during the first seven months of the

year 1914 the course of business of the Company was still normal, it was almost completely paralysed during the entire year 1915. Loan operations were in abeyance, and the Crédit Foncier confined itself to carrying out engagements already undertaken by paying to its mortgagees and communal borrowers the amount of the deferred loans, or by carrying into effect the land advances in respect of which the mortgage formalities had been fulfilled. Finally it resumed discounting the bills of the *Sous-Comptoir des entrepreneurs* on account of the credits opened before the 1st August 1914.

But although the activity of the Company was greatly restricted in the loan department, the same was not the case in the financial sections, which were called upon to receive the final payments of the 1912 and 1913 loans and to effect exchange of the definitive stock of the 1912 communal loan. Furthermore, the Crédit Foncier took part in the issue of the French 5 % loan.

The results of the financial year, under these circumstances, are satisfactory, as may be realised by the following comparative table :

RECEIPTS.	1914	1915
Proceeds of land loans	13,367,351	17,124,211
Proceeds of communal loans	6,182,668	6,876,771
Sundry proceeds (capital, reserve and provision, current accounts funds, floating capital and liquidation of the mortgage Bank)	22,678,196	25,803,876
Totals	42,128,215	49,804,858
EXPENDITURE.		
Loans :		
Ordinary provision	7,558,251	7,864,259
Extraordinary provision	3,000,000	3,000,000
Provision for bad debts and sundry redemptions	291,556	6,159,565
Real property reserve	1,000,000	1,100,000
Provision for loan risks	10,000,000	11,000,000
Taxes, licences, contributions to superannuation funds, receipt stamps, etc.	2,071,380	11,923,683
Total provisions	23,921,187	31,047,507
General expenses	5,602,456	6,146,332
Total	29,523,643	37,193,839
The receipts being	42,128,215	49,804,858
The net profits are	13,604,572	12,611,019
Brought forward from previous years	136,070	219,728
Available total	12,740,642	12,830,747

	1914	1915
The profits were distributed as follows :		
Obligatory reserve fund	20,914	22,204
Dividend	12,500,000	12,500,000
Carried forward	219,728	308,543
Total . . .	12,740,642	12,830,747

During the year 1915, the Crédit Foncier made 661 mortgage loans for a sum of 22,586,495 francs, instead of 5,332 in 1914 for a sum of 172,123,641 francs, being a reduction of 4,671 in the number of loans and 149,537,146 francs in the total. On the other hand the amount of repayments in advance was only 13,631,892 francs, instead of 40,702,308 francs.

The amount of the half years in arrears at 31st December 1914 was 55,845,989 francs. As the half-years maturing in 1915 amounted to 150,500,308 francs, the total of the annuities to be recovered was 206,426,297 francs. There were recovered 88,091,918 francs, so that there remained due at the 31st December 118,334,830 francs. At the 29th February 1916 this total had fallen to 111,936,723 francs, of which 33,658,652 francs were prior to the financial year 1915.

The mortgage loans recoverable in the invaded departments did not reach the sum of 116,500,000 francs.

As regards the communal loans, the Crédit Foncier, in 1915, carried out 9 for a total of 3,791,792 francs, instead of 1,227 loans for 78,896,129 francs in 1914, being a reduction of 1,218 in number and 75,104,337 francs in amount. On the other hand the amount of the repayments in advance, which in 1914 had reached 17,142,892, represented in 1915 8,497,452 francs.

The amount of the half-years at 31st December 1914 was 8,404,242 francs. The half-years maturing in 1915 amounted to 150,321,346 francs. While the total of annuities to be recovered in 1915 was 158,725,588 francs, the amount actually got in was 139,744,858 francs, leaving outstanding at the 31st December 18,980,730 francs. At the 29th February 1916, the arrears were reduced to 16,914,465 francs, of which 1,701,152 francs were in respect of years prior to 1915. The total amount of the communal loans granted in the invaded departments amounts to about 245 millions.

For the Crédit Foncier, whose operations could not be otherwise than curtailed by the war, the year 1915 was a non-committal year. The Board confined itself to carrying out or liquidating operations current at the time when hostilities broke out and the few new mortgage loans were in reality nothing but the consolidation, after completion of the constructions, of credits opened before the war through the *Sous-Comptoir des entrepreneurs*.

In 1915, the principal object of concern on the part of the Government, the Company and the Board of Directors was the getting in of the annuities. Though the receipts under this head were comparatively normal for the loans granted to the departments, communes or public establish-

ments (excepting of course those connected with the invaded regions), the same was not the case with the mortgage loans. The position, unfavourable at the end of 1914, grew still worse in 1915. As to those debtors who are with the colours and whose property is in the territory occupied by the enemy, one must perforce bow to the course of events and wait for brighter days. For the rest, the loans in the second category represent only an inconsiderable part of the total of mortgage operations of the Crédit Foncier. In the great majority of the other operations, the principal cause of the delay in the payment of the annuities lies in the measures relating to rents and farms. Many borrowers from the Crédit Foncier, being deprived frequently of a considerable part and sometimes almost of the whole of the resources on which they relied, have had difficulty in meeting the expenses on their properties, and find in these circumstances an excuse for their temporary default. Many others however, wrongfully take shelter behind the moratorium decrees, and profit by the difficulty or even impossibility of proceedings arising from the measures promulgated by the public authorities.

In spite of this position, the accounts exhibit a considerable increase of profits over the year 1914 ; needless to say these results cannot have accrued from the operations of the year 1915 itself, which were almost *nil ;* but in institutions which grant long date loans, the profits appearing in the entries for one year are the outcome of the operations undertaken sometimes a very long while beforehand, and in the same way, it is not until many years have passed that the losses which are inevitable even in the best conducted business show themselves in the accounts. The profits shown by the accounts moreover, although perfectly correct and quite legitimate, are very far from having entirely accrued or been paid in ; a large portion is made up by interest on annuities in arrears and overdue credits.

Part IV: Agricultural Economy in General

NEW ZEALAND.

CLOSER SETTLEMENT IN NEW ZEALAND

By The Under-Secretary of Lands.

§ 1. What is closer settlement, and why is it needed.

When the Dominion of New Zealand was first settled by colonists from Great Britain and Europe, a large proportion of the lands in the Dominion were not occupied by the Maori inhabitants, and consequently the limited number of colonists had full opportunity of selecting land in large areas. Moreover, as the finances of the country were at that time to a large extent dependent upon the sales of land, it naturally followed that the Government of the country was anxious to settle its vacant lands at the earliest possible opportunity, so as to increase the population of each province and render its land productive. Land belonging to the Crown was therefore offered in large areas and at low prices, and it was not until comparatively recent years that the gradual rise in population and the decrease in the area available for future selection presented a problem to the Government of the country. At this time a new factor considerably enlarged the commercial activities of the country by the introduction of refrigeration in the meat and butter industry, rendering it possible to convey large quantities of New Zealand's primary and perishable products to the distant and remunerative markets of the world. The first shipment of frozen meat was made in 1882, and the success of the trial and subsequent shipments occasioned a great expansion of trade and a demand for sheep and dairy farms, which, coupled with the increasing productiveness of the soil, had a corresponding tendency to raise

the value of the land, so that it was found imperative that the larger holdings which characterised many parts of the Dominion should be subdivided into smaller areas, and cultivated in a more intense manner, and thereby yield larger returns and support a greater population. Various methods were adopted in order to bring this about in a satisfactory manner.

§ 2. Disposal of Crown Lands in Smaller Areas.

As the first step in dealing with the matter, the Government when opening its waste lands for public selection, offered them in reduced areas and at enhanced prices, due to the appreciation in value that has been such a marked feature of the last twenty years. Moreover, lands that previously had been thought more or less unsuitable for settlement in any but extensive areas were gradually found to be capable of utilisation in moderately sized pastoral runs, whilst the growth of the dairy industry enabled the most valuable of the Crown lands to be occupied by families in areas much smaller than had been the rule. Every effort was made to utilise the Crown lands to the best advantage, and whenever leases of pastoral lands expired the areas were carefully inspected, and, if practicable, subdivided so that two or three holdings might be offered in place of the one original selection. In addition, forest reserves from which the milling timber had been removed were rendered available for settlement, and surplus areas of Native land not required for the personal occupation of the owners were purchased by the Crown and offered for public selection. The increasing needs of settlement, however, necessitated further steps being taken, with the result that in 1892 a Land for Settlements Act was introduced and passed by Parliament.

§ 3. Land for Closer Settlements.

The Land for Settlements Act was first introduced in 1892, and with modifications and additions is still the law of the country. Under its provisions the Crown — by means of a Board of Government officers and land valuers — is empowered to purchase from owners of freehold property, estates that are suitable for subdivision and closer settlement. A large proportion of such purchases is by means of mutual arrangement, but the Act contains provisions for the compulsory acquisition of estates, and for the determination of the purchase price in a prescribed manner. This was originally through the matter being submitted to a special Compensation Court, consisting of a Judge of the Supreme Court, and a representative of the owner of the land and of the Crown. This Court had to fix the price that should be paid by the Crown for the taking of the land, and if the three members did not agree as to the price, it was settled by the majority. Several estates were acquired

in this manner. Of late years, however, the price has been determined by the owner being paid the unimproved value of the land as given in the Government Valuation roll, upon which the owner has been paying rates, plus from 5 to 10 per cent. of the value so stated, together with the value of improvements standing on the land. To the total amount so ascertained another 10 per cent. is added by way of compensation for the compulsory taking, and after the estate is acquired, the former owner has a right of obtaining a lease from the Crown of a holding out of the estate sufficient for his maintenance.

This Act has been widely availed of, and since the inauguration of the system, up to the 31st March, 1915, a total number of 282 estates, containing 1,540,578 acres, have been acquired, and no less than 5,477 separate farms are now occupied thereon. The cost of acquisition of this land was £7,293,300, and the improvement thereof prior and subsequent to selection has amounted to £570,016. This amount has been raised by way of Government loans, on which interest varying from 3 ½ to 4 per cent. per annum is payable, and such interest is recouped from the rents paid by the settlers, which are fixed at the rate of 4 ½ per cent. on the capital value of the holdings. It will therefore be seen that the scheme is self supporting, and whilst there is very little financial profit made by the Government on the transaction, no loss is imposed upon the revenue of the country by the scheme of settlement. The productiveness of land settled in this manner has been largely augmented, and the rural population has been continually added to. The average holding for each settler and his family is about 250 to 300 acres and its acquisition may cost the country about £1,400, but as the settler pays rent on all such outlay there is really no call upon the taxpayer of the Dominion, and the National Debt is only nominally added to.

It was, however, found that this scheme of closer settlement involved the raising of large loans and did not always meet the requirements of settlers. To supplement its activities, therefore, a new scheme was put into operation.

§ 4. Land finance settlements.

In 1909 the Land Settlement Finance Act was passed by the legislature. The Act promoted the closer settlement of land by enabling groups of private persons to purchase a block of freehold land and subdivide and occupy it in separate holdings. The purchase price is paid by means of debentures guaranteed by the Government, the members of each association only paying a small deposit when taking up the land, and giving a mortgage over their respective holdings to the association as securities for the debentures issued thereon. The purchase money is paid off by each settler within a period of twenty years, and the Crown — prior to guaranteeing the debentures — has each proposed settlement carefully inspected and

valued, so that the debentures are not issued until the Crown is satisfied that the land is worth the price proposed to be paid. The holdings may not be less then twenty-five acres and not more than 200 acres, but if the acreage value of the land is small the holding may be increased up to 500 acres, provided that the total value of the holding does not exceed £2,500. From the coming into force of the Act, up to 31st March, 1915, forty-four settlements containing 303 members have been formed, the area taken up being 42,511 acres, for which the purchase price was £583,477.

REGENCY OF TUNIS.

THE "REVICTUALLING ACCOUNT" AND ITS OPERATION.

SOURCES :

PROCÈS-VERBAUX DE LA CONFÉRENCE CONSULTATIVE, SECTION FRANÇAISE (*Report of the Consultative Conference, French Section*), Sitting of the 30th December 1915. (Journal Officiel Tunisien, 2nd February 1916).

The readers of this Bulletin are already aware of the wretched state into which the agricultural crisis of 1914 and the beginning of hostilities had plunged Tunisia (1). It had been essential to come to the assistance, with the utmost speed, of the hard-pressed population, by supplying them with sowing seed for the agricultural season 1914-1915 and ensuring their food supply to prevent their death from starvation. It was almost simultaneously necessary to provide for replenishing the Regence with grain, sugar and petrol. The initiative of the Government was at the same time directed towards protecting debtors by moratorium measures, at first general and later limited to those with the colours and members of the family living beneath their roof. As and when these measures were more and more restricted, the Government endeavoured to revive credit in all branches of commerce and industry with regard to which the laws or regulations give it the right of supervision or advice. It even intervened in many cases by making direct advances or giving guarantees to members. By contracts with the military commissariat department it was also concerned to ensure work to weavers and work people, men or women, by employing them on the making of warm woollen clothing for soldiers at the front.

To meet these various requirements considerable resources were needed. They were found by the establishment by decree of the 21st September 1914, of an account called the revictualling account, receiving its supplies out of sums available for the time at the Treasury and advances by the Bank of Algeria.

The decree estimated at fifteen million francs the amount of the operations which the revictualling account might have to undertake. Its opera-

(1) See the analysis which we gave of the study of M. Charles Géniaux on « La Tunisie pendant la guerre » (*Tunisia during the War*) in our issue of December 1915, pp. 125-129.

tions really amounted to nearly 23 million francs. It was indeed impossible to confine them to their original purpose, which was that of revictualling, and State action had to be extended in many other directions. On the other hand, not only were these endeavours made in 1914 ; they were continued in 1915 as provided in the decree which organised them, and they are still proceeding. It will be easily understood that under these circumstances the capital of the revictualling account, although fixed at 15 million francs, necessarily exceeded this figure, and the Government, with the consent of the Home Government raised it to thirty million francs.

Furthermore, no operation was undertaken until there were manifold guarantees as to repayment. Advances were only made on payment orders of the General Director of Finance with all the vouchers prescribed by the law of public accounts. They are comprised in the accounts of the General Revenue Office, their collection or completion is energetically taken in hand, their present balance does not show an expenditure exceeding three and a half million francs, and when the account is closed there will be drawn up for the French Court of Accounts a general table of all the operations of receipts and expenditure together with the above vouchers, the balance sheet of which will show the final surplus or deficit : which surplus will profit the budget, or the deficit will put down to the debit of the Treasury reserves by virtue of a decree issued in legal form after being submitted to the French Government. We may add that in consideration of the results already obtained, the General Director of Finance does not apprehend a deficit ; such deficit could only arise through future operations and there is no reason to believe that they will be less successful than the previous ones.

The following were, at the date of the 30th November 1915, the operations undertaken under the revictualling account :

Description of operations	Amount of operations	Remarks. Quantities involved in the operations	
§ 1. Revictualling account:			Quintals
Cereals: Loans of seed to natives (1)	6,507,994.43	(1) (*a*) Hard wheat	125,880.50
Cereals: Loans of seed to settlers. .	100,100.00	(*b*) Soft-wheat .	170.80
		(*c*) Barley . . .	94,654.00
Cereals: Loans for living and food supply to natives (2) .	5,352,880.00	(*d*) Beans . . .	1,271.77
		Total. . .	216,977.07
Cereals: Revictualling proper (3) .	3,739,645.78	(2) (*a*) Barley . . .	122,556.00
		(*b*) Maize . . .	104,635.00
Total . . . Fr.	15,700,526.31	Total. . .	227,231.00
Sugar (4).	4,513,693.46	(3) Hard wheat . .	97,078.90
Petroleum (5).	211,825.59		
Potatoes (6)	55,000.00		Kilos
Total of § 1 — Revictualling. . .	20,481,045.36	(4) 1st purchase . .	6,500,000.00
§ 2 — Advances to public services and establishments	448,676.14	2nd purchase (proceeding). .	5,000,000.00
		Total. . .	11,500,000.00
§ 3 — Advances to companies or undertakings (mines, phosphates, salt works	866,017.01	(5) 1,246,033 litre	
§ 4 — Advances for the manufacture of warm clothing for soldiers . .	540.175.86	(6) Deliveries already received. .	1,368,354.00
§ 5 — Advances to sundry third parties	148,905.76	Deliveries to be received.	2,131,646.00
		Total. . .	3,500,000.00
§ 6. — Interest	399,975.51	Expenses of 1914 .	5,667,339.16
Tottal. . . Fr.	22,884,795.64	Expenses of 1915 (at 30 November) . .	17.217,456.48

This table calls for the following remarks :

(1). The seed loans to the natives, which are set down at 217,000 quintals at a cost of Fr. 6,507,994.43, the heaviest ever advanced in Tunisia for that purpose, aie guaranteed to the revictualling account by the native Provident Societies, who have already recovered one half of it. It has not been possible to recover the entire amounts, because the natives had been so exhausted physically and economically by the agricultural crisis of 1914, they were so strongly in need of recuperation, and were indebted both to the public Treasury and privately for such large amounts relatively speaking, that it became necessary to treat them with great consideration ;

neither the Treasury not the native Provident Societies desired to exercise against third persons all their privileged, preference or prior rights and liens, still less to exhaust all their means of action against tax payers, to whom it was even necessary to make fresh loans for the 1915-1916 season. The recovery of the balance of the 1914-1915 seed loans will take place after the 1916 crop, of which the recent rains give a good augury. Moreover, the Government proposes to give the collectors a direct interest by allocating to them, at the expense of the native Provident Societies, a proportional reduction on their receipts in this respect, for which they receive no precise remuneration.

(2). Loans to settlers only appear in the table for 100,000 francs, but that is only a fraction of the effort made by the Administration in their favour. In the first place, there was appropriated to them a sum of 300,000 francs taken from the fund of the surpluses available by virtue of a decree of the 15th June 1914 and which was paid to the Cooperative Society of Agriculturists, which gave it as security to the Land Loan Bank (Crédit foncier) of Algeria and Tunisia. Against this security the Crédit foncier opened in favour of the Cooperative Society, both for the sowings of 1914-15 and the spring tillage in 1915, and dressing work of the vine, credits aggregating 1,600,000 francs, of which 100,000 francs were furnished by the revictualling account as shown by the above table. The settlers' loans for 1914-1915 were recovered in the proportion of 80 %. For the rest, facilities were granted until the 1916 crop. The 200,000 francs provided as security by the Treasury consequently remained subject to this lien ; a decree of the 29th December 1915 also appropriated this same amount as a guarantee for the new seed and sowing loans which the Cooperative Society had to advance to settlers for the 1915-1916 season, with the cooperation of the revictualling account. This account, enjoying the fourfold guarantee of the debtors who contracted the loans, the Cooperative society which gave them, the Banks which discounted them, and the Fund of 200,000 francs furnished by the Treasury, need not fear any detriment as a result of its assistance, which yields it an interest calculated at the same rate as the re-discount rate of the Bank of Algeria.

(3). The loans of commodities for food and subsistence to the natives, which amounted to 227,231 quintals, account for an expenditure of 5,352,880 francs 10 centimes in the table. They were made by the revictualling account for and in the name of the native Provident Societies which are accountable for them to the revictualling account. In reality, however, the native Societies are unable to repay to the last named account, if they do not manage to recoup themselves from their native debtors. The attempts at recovery which they made in 1915, after the cereal crop, only brought in about 132,000 francs. Reference was made above to the moderation which had to be exercised in recovering the seed loans ; so much the more needful was it then to show an accommodating spirit towards the extremely wretched people who had needed assistance to prevent their succumbing to the famine in 1914-1915. Undoubtedly the grain supplied to them for their food took the form of a loan, which was repayable ; it would have

been dangerous to proceed otherwise and to make these poor people believe that they contract no debt in respect of the assistance afforded them ; they would be too greatly tempted to rely on the indefinite repetition of similar generosity ; it is necessary to keep this temptation within bounds by holding over them the obligation of repayment and demanding its fulfilment with all such leniency as humanity demands. The recovery of the 1914-1915 loans is therefore no more abandoned than that of the balances of previous loans of the same kind. As however the revictualling account, which is essentially temporary in character, cannot wait for payment until the debtors discharge their debts, the State has substituted itself for the Account as regards the advance : a first credit of 2 millions had been opened for that purpose by the decree of the 15th June 1914 ; a second credit of 2,325,000 francs was appropriated for completion of the operation, with the authorisation of the Home Government. These sums were placed at the disposal of the native Provident Societies, which will thence be able to repay the revictualling account, but which must henceforward pay in what they succeed in recovering of the subsistence loans, not to the said account, but to the State, which will enter the same in its ordinary budget of receipts as being the proceeds of repayment.

The revictualling operations proper related to grain, petroleum, sugar and potatoes.

The grain operations have been completed but not yet liquidated. They covered 97,000 quintals of wheat, of a total value of 3,339,645 francs 78 centimes. They consisted of purchases and re-sales, and never of loans Nevertheless they left a fairly big loss (about 270,000 francs) resulting from the fact that the last cereals bought arrived in Tunisia after great delay, at the moment when the grain of the Tunisian crop was already making its appearance on the market, which compelled their re-sale below cost price. Really, as the cost price included the import duty into Tunisia, which benefited the budget, the loss sustained by the revictualling account was counterbalanced by the gain made by the budget. In the final upshot the operation was of advantage to Tunisia, and with regard to the revictualling account, its loss will be made good by the profits yielded by its other operations.

The petroleum operations took place and terminated in 1914. They comprised 1,246,033 litres of petroleum and a total sum of 211,825 francs 59 c., being liquidated without profit or loss.

The sugar operations, which began in 1914 and still continue, had, at 30th November 1915, entailed an aggregate outlay of 4,513,693 francs 46 c. The purchases were made in Italy ; one, of 6500 tons, has been completely delivered, the other, of 5000 tons, is in course of delivery, but difficulties in exportation procedure have arisen and have retarded the operation of the *de facto* monopoly, which the Direction of Finance tended to institute in Tunisia, to the great advantage of the Treasury and the consumer.

The potato operations are in progress. They cover 3,500 tons (more than half already delivered) of a value of about 500,000 francs, recovered

almost as soon as paid, the re-sale following immediately on the arrival of the potatoes in Tunisia.

Secured advances at interest have been made by the revictualling account :

To the amount of 866,017 francs 1 c. to various Companies and undertakings holding mining or phosphate concessions.

To the amount of 448,676 francs 14 c. to public services and establishments, such as the administration of the Habous, whose revenue consisting of fruits and rent was reduced or remained unpaid owing to the bad harvest to such an extent that the operation of its various institutions would have been jeopardised without the advances of the revictualling account.

Up to Fr. 148,905.76 to various third parties who now still owe only 2000 francs.

Finally, the revictualling account lent its cooperation for the manufacture of the warm clothing intended for the soldiers during the winter 1914-1915. This manufacture, undertaken under the auspices of the Direction of Native Economic Services, and for account of the Army Supplies Department of the Division occupying Tunisia, entailed an expenditure of 540,175 francs 86 centimes advanced by the revictualling account, and completely refunded at cost price, without profit on either side, by the Army Supplies Department.

Completing the comments called for by the table of operations of the revictualling account, we may add :

(1). That the revictualling account had already, at 30th Novembre 1915, paid either to the Treasury or to the Bank of Algeria, as interest on the capital needed for its operation, a sum of 399,975 francs 51 c. for which it is being or will be recouped as and when settlement is made with its debtors ;

(2). That its operation had, on the other hand, yielded to the Treasury in customs duty or internal duty on cereals, sugar, petroleum and potatoes, and for registration duty, a sum of more than 2,200,000 francs.

MISCELLANEOUS INFORMATION IN RELATION TO AGRARIAN ECONOMY GENERALLY IN SOME COUNTRIES.

CANADA.

THE TOWNWARD MIGRATION OF THE RURAL POPULATION AND ITS POSSIBLE REMEDIES. — « La désertion des campagnes. Ses causes, ses remèdes », (« The desertion of the Countryside ; its Causes and Remedies ») by Adélard Dugré. Published by the Ministry of Agriculture, Bulletin No. 19, 1916.

The depletion of the countryside population, which is assuming grave proportions in Canada, is rightly a matter of concern to the Government of that country. The evils entailed by the desertion of the countryside are too well known to admit of such a problem being neglected the moment it arises, above all in the case of an eminently agricultural country like Canada, whose immense natural wealth is very far as yet from being properly turned to account.

From 1901 to 1911, the rural population of Ontario fell off by 52,184 souls, while the urban population increased by 392,511. The seaboard provinces likewise recorded a reduction in the population of their rural districts, while the population of their towns swelled considerably. In the province of Quebec, while the population of the towns grew by 313,863, that of rural districts, including the recently settled parts, increased only by 39,951. Twenty-six counties even showed a diminution of their rural population. A like reduction had also taken place from 1891 to 1901 in 26 counties. This reduction had been 45,318 during the first period and amounted to 25,628 in the second.

An enquiry carried out in 1909 showed that the old parishes continue to lose a large proportion of their population on the land. The enquirer, M. René Dupont, consulted the priests of 695 parishes and obtained 603 replies. He was thus able to ascertain that the number of persons in these parishes who left their homes in 1909 totalled 19,093 ; some simply left the province, others made their way to the United States.

In the whole of Canada, Alberta and Saskatchewan are the only provinces where the rural population rose more rapidly than the urban. The following table shows this increase in the different provinces, from 1901 to 1911:

	Urban population		Rural population	
Alberta	increase	121,314	increase	180,327
British Columbia	"	113,505	"	100,318
Manitoba	"	129,892	"	70,511
New Brunswick	"	22,262	reduction	1,493
Nova Scotia	"	56,745	"	23,981
Ontario	"	392,511	"	52,184
Quebec	"	313,863	increase	39,951
Prince Edward Island	"	15	reduction	9,546
Saskatchewan	"	113,815	increase	287,338

In the whole of Canada, from 1901 to 1911, the urban population increased by 1,263,922, while the rural population only increased by 591,241. If the movement continues, the population of the towns, i. e. the number of consumers, will soon exceed the number of producers. This is what has already happened in Ontario, where the urban population now shows a preponderance over the rural population. In the province of Quebec the rural population forms only 51.6 % of the total. It formed 80.5 % in 1871. To show how this percentage has varied during the last forty years, the following table has been drawn up, which seems to approximate fairly closely to the truth:

	Urban population		Rural population
In 1871	19.5 %	of the total population	80.5
" 1881	22.8	" "	77.2
" 1891	29.2	" "	70.8
" 1901	39.8	" "	60.2
" 1911	48.4	" "	51.6

In 1901, for every 100 inhabitants living in the towns, there were 165 living in the country, while at present to 100 inhabitants living in the town there are only 119 living in the country.

The desertion of the countryside therefore, according to these figures, is very marked, and it is for the rest connected with the attraction exercised on the land workers by the vicinity of the United States, and also the very rapid industrialisation of the east of Canada.

" If we wish to keep our people in the country districts ", says the author of the pamphlet, " two things are needed: to induce them to do so and provide them with the means. The first point may be attained by a rational and prolonged educational campaign, in which all those who command the hearing of youth should collaborate. The agricultural colleges are already working in this direction, with a success which would not have been anticipated ten years ago ; thus they will soon spread abroad, through the length and breadth of the country, intelligent and progressive young

farmers, whose example alone will be the best training for that part of the rural population which is hostile to all innovations ".

The educative action must furthermore also be exerted in the countryside by developing there the spirit of association, which not only takes the form in practice of mutual protection by small farmers, but also of improvement of their lands and produce. To do this there is needed the collaboration of the large and medium farmers who have greater influence over the small farmers, and can consequently persuade them to join with them, taking the necessary steps and sharing the first expenses for improvement of the land. When once the cooperative societies have been formed, or the farmers have joined the societies already existing, the workers on the land will soon find those financial facilities which they lack.

Cooperation will therefore also serve to achieve the second object in view. It will however be the more effective in the measure in which a large area of easily accessible land can be offered to farmers. Already, " several farmers will be able to establish themselves comfortably when there is not so much anxiety to have extensive lands as to have well cultivated lands, and when the trouble is taken to develop the resources of the soil under cultivation ". This amounts therefore to replacing extensive by intensive cultivation. Finally, the endeavour should be made to direct many farmers' families towards the new regions not yet settled, by granting them special encouragements.

UNITED STATES.

RURAL CREDIT BILLS BEFORE CONGRESS. — *California Fruit News*, San Francisco, March 25, 1916. — Among the rural credit bills introduced in the House of Representatives during the 64th Congress, now in session, are the following.

H. R. 206. A bill to provide a system of loans to farmers in landed securities.

H. R. 240. A bill to create a farm credit bureau in the Department of Agriculture, to encourage agriculture and ownership of farm homes, to secure a reduction of interest on farm first mortgages, and for other purposes.

H. R. 263. A bill to provide for the making of farm loans the postal savings funds.

H. R. 391. A bill for the establishment of a farm credit bureau in the Department of Agriculture, to reduce the rate of interest of farm mortgages and to encourage agriculture and the ownership of farm homes.

H. R. 398. A bill to establish a Federal rural credits bureau in the Department of the Treasury, and to authorize such bureau to make loans on farm lands.

H. R. 404. A bill authorizing the Secretary of the Treasury to loan money to farmers and taking certain securities therefore.

H. R. 595. A bill to provide for a low rate of interest and long-time loans in aid of agriculture, and for other purposes.

H. R. 4597. A bill to establish a Government bureau to loan money on agricultural lands as security.

H. R. 4809. A bill to provide for a low rate of interest and long-time loans in aid of agriculture and for other purposes.

H. R. 6039. A bill to provide capital for agricultural development, to create a standard form of investment based upon farm mortgages, to equalise rates of interest upon farm loans, to furnish a market for United States bonds, to provide a method for applying postal savings deposits to the promotion of the public welfare, and for other purposes.

H. R. 6922. A bill to provide for the making of farm loans from the postal savings funds, to provide a low rate of interest and long-time loans in aid of agriculture and the ownership of farm homes, and for other purposes.

H. R. 6912. A bill to establish national farm-land banks, to provide for a low rate of interest and long-time loans in aid of agriculture, and for other purposes.

H. R. 9907. A bill to establish postal savings banks, to enable the Government to borrow money directly from the people, and to market its bonds directly to the people in small and varying denominations through the medium of the post office, and for other purposes.

H. R. 10314. A bill to provide capital for agricultural development, to create a standard form to investment based upon farm mortgage, to equalize rates of interest upon farm loans, to furnish a market for United States bonds, to create Government depositaries and financial agents for the United States and for other purposes.

H. R. 10661. A bill to provide capital for agricultural and urban home development; to create standard forms of investment, one based upon farm mortgages and another upon urban home mortgages; to equalize rates of interest; to provide for deposits and personal credits; to furnish a market for United States bonds; to create Government depositaries and financial agents for the United States, and for other purposes.

H. R. 10761. A bill to provide capital for agricultural development, to create a standard form of investment based upon farm mortgages, to equalize rates of interest upon farm loans, to furnish a market for United States bonds, to provide a method of applying postal savings deposits to the promotion of the public welfare, and for other purposes.

H. R. 6838. A bill to provide capital for agricultural development, to create a standard form of investment based upon farm mortgage, to equalize rates of interest upon farm loans, to furnish a market for United States bonds, to create Government depositaries and financial agents for the United States, and for other purposes.

FRANCE.

THE APPRENTICESHIP OF SHEPHERDS. — Feuille d'information du Ministère de l'Agriculture, 14 March 1916.

Though agricultural statistics show that from 1840 to the present time the number of sheep in France has decreased 50 %, dropping from 32,151,430 head to 16,767,700 in 1912, it should not be concluded from this that the number of flocks has declined in the same proportion. Nor yet can it be inferred that the occupation of shepherd has experienced the effects of any such reduction, and is no longer equal to other agricultural employments.

As a matter of fact it has, for many years now, been perceived that the reduction in the number of sheep was not only due to the elimination of fallow lands, the practice of ploughing up stubble fields and the extension of pasturages and artificial grass lands as a result of the use of chemical manures and suitable dressings, but also to modifications in methods of rearing and fattening.

It is estimated that at least four-fifths of the sheep sent to the abattoirs are now killed at an average age two-thirds less than what it used to be, and that these animals nevertheless yield on the average a greater weight of meat. Sugar-mill and distillery waste, in fact, allow of fattening more numerous flocks than formerly on certain farms and renewing them more frequently. It is incorrect to say that sheep rearing has declined through the encroachments of intensive cultivation. There is no doubt that it has made room for beef cattle, and particularly for milch cows, in non-fertile parts where an improvement of the soil has allowed of forming artificial grass lands, but it should be noted that in these cases the flocks, consisting only of a few head, were generally tended by the children of the small tenant farmers, and that the number of paid shepherds has therefore not been reduced there.

It is nevertheless certain that sheep breeding has been completely modified in those parts where cultivation is on a large scale, and that the shepherd's trade has undergone a change for the better.

Instead of driving out his animals during the greater part of the year on to lands bearing only a poor and chance vegetation, penning them in there, putting up and taking down the fold at times after nightfall and thus being exposed to inclemencies of the weather, and possessing nothing but an uncomfortable, narrow cabin for his night shelter, the shepherd only takes out his animals every day if the weather is favourable, in the spring, to fields growing crimson clover or annual forage plants, to natural grass lands, along roads, rivers or ponds ; in summer, over cereal stubble ; in the autumn over artificial grass lands or into the beetroot fields. Although really it still exists in a fair number of places, the practice of folding in the field tends to disappear more and more or is only exceptional, both owing to the mishaps it causes in the rearing of the sheep and owing to its bad results from the point of view of the regular fertilising of the land. Conse-

quently the shepherd's trade is a less laborious one ; on the other hand it requires more craft training than formerly. The shepherd is required to know the particular ration suitable for the different groups forming the flock : breeding ewes, fattening sheep, lambs to be kept for reproduction, and lambs for fattening, the very different age or condition of which determines the formation of distinct lots. Important as it is that he should know how to guide a flock through fields covered with crops, he must above all know how to shear, how to dock the tails of the lambs and castrate them, to look after the sheep at the time of lambing and during suckling, to properly treat sick or injured animals, to notice their condition at once, and even to prevent cases of indigestion by a good distribution of the rations. All this is learned pretty quickly, but only from competent shepherds and instructors, on a farm where the flock is considerable and where it is maintained either with a view to speculations of a very varied character or only with a view to this practical instruction.

The fresh decrease since the war in the actual number of flocks has prompted the Minister of Agriculture to reopen a shepherds' school at the national farm of Rambouillet. The proposal of M. Hanotaux, the late Minister of foreign affairs, to cover the annual expenses of providing a home there for 35 men crippled in the war, has largely contributed to this decision.

The national school of agriculture at Grignon, the practical schools of Oisellerie (Charente), La Brosse (Yonne) and Chatillon-sur-Seine (Côte d'Or) will on their part organise special sections of apprentice-shepherds. It is hoped that farmers will thus soon be able to find the specially trained men who are entirely lacking, and whose absence, as has frequently been observed, has compelled them to give up sheep breeding.

Many war cripples are capable of making good shepherds. The carrying on of this trade is quite compatible with the loss of an eye, an arm or a leg, and in most cases involves but moderate strain.

If account be taken of the conditions of life of the shepherd, who today generally has a cottage and a garden, who furthermore possesses a few hours of leisure every day, and can even get his place taken sometimes on Sundays when the flock is kept at the home pen, it must be admitted that of all agricultural trades that of the shepherd is one of the best paid and the most enviable. Some further idea of this will be furnished by the following average figures extracted from the "*Enquiry into agricultural wages*" in 1902:

Regions	Annual earnings	Incidental earnings
Soisson (Aisne)	1,200 to 1,300 fr.	Lodging and garden
Champagne (Marne) . .	1,000 to 1,200 "	Lodging and garden
Nogent (Aube).	700 to 800 "	Lodging and food
Oise	1,100 to 1,200 "	Lodging and garden
Seine-et-Marne	700 to 800 "	Lodging and food
Chatillon (Côte-d'Or) . .	600 to 700 "	Lodging, food and 20 to 40 fr. gratuities

To these wages there must also be added certain allowances which are becoming more and more usual, such as the allowance for food for dogs, a bonus of 5 to 10 francs for shearing, 15 to 50 centimes per animal delivered to the butcher and 50 centimes for the safe birth of each lamb, etc. All these advantages deserve to be taken into serious consideration by those who return disabled from the war.

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THE EXPANSION OF MECHANICAL INDUSTRY IN THE COUNTRY AND THE TOWNWARD MIGRATION. — Pawlowski (Auguste) : La désertion des campagnes et le lendemain de la guerre (The desertion of the countryside and the morrow of the war), in the *Revue politique et parlementaire*, of 10 April 1916.

Mr. Pawlowski points, as the means of combatting the desertion of the countryside, to several experiments on a large scale in relation to mechanical industry, which have been carried out with unquestionable success. One of them may serve as an example.

The town of Saint-Etienne was, at the beginning of the XIXth century, a small city of only 25,000 inhabitants. To-day its population exceeds 150,000 souls. Its growth is traceable both to the development of the mining and metallurgical industry and to the expansion in the ribbon manufacture. The embroidery work of Saint-Etienne has a place to itself in the world.

Until 1900, the concentration of the ribbon industry had been the characteristic feature of the expansion of that city. The rural districts of the Haute-Loire had emptied themselves completely for the benefit of the towns when, some fifteen years ago, the idea was conceived of relieving the congestion of Saint Etienne by spreading the power loom through the deserted villages.

Waterfalls were called into requisition, electricity distributing systems were constructed, and the power looms of Saint-Etienne fell off gradually in number in proportion as the number of country looms grew, as is proved by the following statistics :

	Saint-Etienne and Côte-Chaude — Looms.	Loire (Saint-Etienne excluded) —	Haute-Loire —
1901	4,798	1,372	434
1902	5,508	1,636	1,080
1903	5,812	1,760	1,738
1904	5,647	1,813	2,349
1905	5,706	1,913	2,784
1906	5,618	1,886	3.149
1907	5,716	2,045	3,482
1908	5,600	2,162	3,746
1909	5,471	2,189	3,856
1910	5,322	2,187	4,167
1911	5,063	2,231	4,290
1912	4,849	2,213	4,283
1913	4,650	2,500	4,370
1914	4,730	2,600	4,400

Since 1908, the number of looms at Saint-Etienne has fallen off by 870. From 1901 to 1914, the number of looms in the rural districts of the Loire has doubled, and that of the looms in the Haute-Loire, a one-time forlorn country, has increased tenfold.

To be specific, in 1914 there were :

1,485 looms at Sainte-Sigolène (4,957 inhabitants) ;
276 looms at Saint-Pal-de-Mons, (2,527 inhabitants) ;
256 looms at Les Villettes (1,170 inhabitants) ;
940 looms at Saint-Didier-la Seauve (6,179 inhabitants) ;
148 looms at Saint-Maurice-du-Lignon (2,389 inhabitants) ;
319 looms at Monistrol-sur-Loire (5,087 inhabitants) ;
1,083 looms at Saint-Just-Mallemont (3,574 inhabitants) ;
148 looms at Saint-Genest-Malifaux (Loire) (2,523 inhabitants).

Most of these hamlets witnessed the growth of their population to twice the number in five or six years. They have resumed the aspect which they formerly possessed and had for a moment lost. Rural labourers were highly satisfied with this awakening. Before the war they earned almost as much in the villages as at Saint-Etienne, with very much smaller expenses, living at Saint-Etienne having always been very costly. Their health conditions were singularly improved ; their wives gave them effective assistance, families were no longer broken down by drink and manufacturers addressed themselves more readily to country than to town labourers, the latter being naturally more exacting.

Thus electricity had transformed the entire region and restored life and well-being where desolation reigned.

A like experiment at Lavelanet, in Ariège, served to retain a working population which tended to migrate. The position of the latter has become, perhaps not brilliant, but agreeable at least. For ten hours work the weaver of Ariège earns about eight francs. Many workmen can moreover run two looms, getting their wife or son to look after one of them. This means that the family budget is bigger and better balanced.

It is quite a charming experience to visit an individual modernised weaving loom, where the machines are driven by a small motor. The weavers of Lavelanet no longer think of seeking their fortune elsewhere, and the employer class congratulates itself on the existence of a system which renders strikes illusory and leaves at its disposal for free use the money which the construction of a centralised mill would have necessitated.

In the region of the Jura no less marked results have been secured. The rural district of Sainte-Claude engages in wood-work. In the village and even on the farms wood working was carried on before the war. One commune made pipes exclusively, another mustard spoons, a third small wooden tubes for inflating children's balloons. Labour was formerly ill-paid, with consequent depopulation of the villages. The Electric Union of Saint-Claude thought that by placing the resources of electricity at the disposal of the workers it would prevent the desertion of the hamlets by increasing the wages of workers. Its anticipations have not been falsified. It acted in the same way with the diamond workers who are numerous in that region, and the celluloid workers of Oyonnax. Thanks to its initiative, the region has been repopulated, and the more and more deserted countryside had, between 1902 and 1913, regained 8,000 to 10,000 inhabitants.

ITALY.

THE ESTABLISHMENT OF AN " OFFICE FOR COMMERCIAL AND COLONIAL INFORMATION ". — From a Communication of the Istituto Coloniale Italiano, Rome, 1916.

The Italian Colonial Institute, which proposes " to contribute to the rapid resumption and increase of commercial relations with foreign countries, especially those to which is directed the stream of Italian emigration ", has recently, in concert with the Ministers of Foreign Affairs, Colonies and Agriculture, instituted an *Office for Commercial and Colonial Information.* This Office will supply rapid and precise information and particulars to the foreign and Italian buyer and producer as to the following :

a) raw and half manufactured materials, agricultural and industrial products, Italian and foreign ;

b) commercial practices, requirements of consumers and the position of markets, Italian and foreign ;

c) conditions of packing and forwarding of goods in Italy and abroad ;

d) means of communication, transport and landing, suggesting in each case those most advisable, and giving information on marine charges ;

c) the interpretation and application of customs tariffs, commercial treaties, certificates of origin, import, export and transit licences, etc. ;

f) the loan bank Establishments for Italy and abroad, connected with trade, exports and imports ;

g) information which, though of more or less confidential character relates toItalian commercial activity.

The Office for commercial and colonial information, keeping in direct and continuous touch with agricultural, industrial and commercial circles, will point out :

1) Italian Firms purchasing and able to purchase foreign products, natural and manufactured ;

2) Italian Firms purchasing and able to purchase the products of Italian agriculture or industry ;

3) the commission Houses and commercial representatives whose honest and competent work may promote, enhance and ensure commercial interchange between Italy and foreign countries.

Finally, the said Office, by its continual relations with the technical Government offices, will give its willing and assiduous collaboration towards the speedy solution of all those general and special questions of a commercial or industrial character, which may arise with the public offices of the Italian State.

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AN IMPORTANT DEMAND OF THE TECHNICAL COMMITTEE OF AGRICULTURE IN REFERENCE TO AGRICULTURAL LABOUR. — Bollettino dell'Ufficio Nazionale del Lavoro, Rome, N° 8, 16th April 1916.

In the April *Bulletin* we reported on the formation of a "technical committee" of Agriculture consisting of persons skilled in the technical and economic questions of agriculture, and called upon to exercise the functions previously entrusted to the Superior Council of Agriculture. This Committee, which met on the 33nd March 1915, passed a resolution among other things for the establishment in each division or district of an agricultural labour bureau under the direction of a Commission of which representatives of agriculturists and of the labour organisation should form part. The bureau would have to perform very varied and important duties, such as :

a) take a summary census of the male labour at present available in every agricultural region, and compute its shortage or excess in relation to the needs of local cultivations ;

b) to organise the transfer of labourers from one part to another as need requires ;

c) to promote the employment on the land of city labourers ;

d) to obtain the maximum utilisation of female labour, having recourse to education and propaganda ;

e) to settle in the best practical way, by means of communal Commissions, any disputes arising in connection with labour and wages.

In organising these bureaux regard may be had, according to place and circumstance, to the desirability of coordinating them with already existing institutions.

NEW SOUTH WALES.

GOVERNMENT SHARE FARMING. — The Pastoral Review, Melbourne, Vol. XXVI. January 1916.

Some time ago the Governement announced that it had decided to enter upon an experiment of share farming. Further particulars are now to hand. Twenty ready-made farms of about 800 acres each are now available, and applications are invited from persons wishing to lease them for a period of ten years. The Minister for Agriculture has just announced the following details of the scheme:

The blocks to be allotted to each settler will be approximately 800 acres of which 500 acres will be used for cultivation purposes and 300 acres for grazing. Of the 500 acres referred to, 250 acres must be sown each year, and 250 acres fallowed. Ten acres must be ploughed and planted for afforestation purposes. Sheep should be run on each block; and assistance may be given regarding the purchase of these sheep. The share farmer is to find his own equipment for putting in and taking off the crop, to find his share of the bags and to pay for his share of the cartage. The share farmer is to have two-thirds of the whole of the crop, whether cut for hay or stripped for grain. For the 550 acres (about) of grazing and fallowed land the farmer will pay to the Crown rental at the rate of 2 ½ per cent. on the improved capital value.

RUSSIA

RUSSIAN AGRICULTURAL CONGRESS. — Торгово-Промышленная Газета (*Journal of Industry and Commerce*). Nos 44, 45, 46, 47,; 23-27 February and Хозяйство *Rural Economy*) Nos 9, 10 11, 12; 11-15th March.

On the 22nd February, (6th March) of the present year the annual Russian Agricultural Congress was held at Petrograd, on the proposal of the Russian Chamber of Agriculture. This year's Congress is the fourth, since the foundation of the Chamber which took place in 1912. It presented a novel aspect, inasmuch as for the first time among the representatives of agriculture there also appeared those of the Zemstvos, as members of the Chamber of Agriculture, with fully equal rights. This gratifiyng event, the calling in of the Zemstvo members to collaborate in

connection with questions of great importance for Russian agricultural and national economy, denotes a great forward stride both in the general and economic life of the Empire, which fact was thoroughly appreciated by the Congress. Thus Prince Cherbatoff, a Zemstvo member, formerly Minister for Home Affairs, was elected Chairman of the Congress. The late Minister of Agriculture, Mr. Naumoff, in his address to the Congress, used among others the expression " the Zemstvos dear to my heart ". The papers read and proceedings also made repeated reference to the importance of collaboration with the Zemstvos and the happy results to be expected from it.

The Congress dealt with various questions. In addition to those having reference to conditions prevalent at the present moment, general economic and social, and technical agricultural questions were discussed, which are to serve as general bases in Russian agriculture.

The Congress adopted the following resolutions among others :

For the purpose of studying treaties of commerce, a permanent commission of 10 members is appointed in the Chamber of Agriculture, and in this Commission representatives of the local Provincial and Zemstvo Commissions dealing with these questions may also take part.

For consultation upon general economic questions of the Empire, men belonging to agricultural circles shall also be called in.

The Executive Committee of the Chamber of Agriculture is required to take measures for the purpose of having this Resolution of the Congress carried into effect, if possible forthwith.

Agricultural associations and societies shall be assisted materially, and provided with skilled agricultural staff. The combination of such societies shall also be promoted, and their relations to the Zemstvos clearly laid down.

On the proposal of the former Minister of Agriculture and State Councillor Yermoff (an authority on agrarian matters) it is resolved that both the Government and the legislative bodies be requested to create Zemstvo organisation, so-called small Zemstvo units, on the land. The importance of these bodies to the agricultural population could not be over-estimated in consideration of what the Zemstvos, although at the present time they only exist in the towns of European Russia, had also done for the rural district.

In relation to questions of agricultural credit, a special commission is to be formed by the Executive of the Chamber of Agriculture, in which men of of science, trade and industry are to take part ; the legislature is to be applied to for the introduction of a public system of mortgage and land register, on which land credit is then to be exclusively based.

With regard to the abolition of vodka manufacture and its consequences to agriculture, the Vice-President of the Congress, Prince Galitsin, put the following resolution to the meeting, which we reproduce verbatim, omitting unessential parts.

« As the great reform inaugurating the sobriety of the people has resulted in an abrupt break in the relations between the State vodka monopoly and

the vodka industry, and as this industry was very closely bound up with agriculture, owing to the fact that potato planting had developed all around the distilleries, and cattle breeding had undergone growth, the Congress, in view of this newly-created position, puts on record the desirability that a special examining body be instituted to enquire into all results hence arising, and take measures to prevent any reaction on Russian agriculture, the point of departure in this case to be the complete prohibition of the sale of vodka ».

We have only given prominence here to a few of the resolutions of the Congress, which, in view of the importance of the questions dealt with and also the number of the participants, hailing from all parts of the Empire, has been rightly described by the Minister of Agriculture Naumoff as a mobilisation of Russian agricultural forces.

RUGGERI ALFREDO, gerente responsabile.

INTERNATIONAL INSTITUTE OF AGRICULTURE
BUREAU OF ECONOMIC AND SOCIAL INTELLIGENCE

INTERNATIONAL REVIEW OF AGRICULTURAL ECONOMICS

(MONTHLY BULLETIN OF ECONOMIC AND SOCIAL INTELLIGENCE)

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7TH. YEAR: NUMBER 7
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1916

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DENMARK : Tyende-og daglejerlønnen i landbruget 1915 (*Farm wages in* 1915), page 117.

SWEDEN : Sveriges officiella Statistik (*Official Statistics of Sweden*) : Arbettillgång, arbetstid och arbets lön inom Sveriges jordbruk år 1914. (*Labour supply, working hours and wages in Swedish agriculture in* 1914). page 118.

Part I: Co-operation and Association

DENMARK.

DANISH DAIRIES IN 1914.

OFFICIAL SOURCE:

STATISTISKE MEDDELELSEN: Mejeribruget i Danmark i 1914 (*Statistical Communications: Danish Dairying in* 1916) Copenhagen, 1916.

Following on the study which we recently published (1) on Danish cooperative dairies, we are enabled to complete the particulars already supplied by those relating to the financial year 1914.

The materials for these new data were collected in connection with the census of the industry in 1914.

Towards 1880 a great development of the Danish dairy industry began, and farmers, owing to the decline in the price of wheat on the market of the world, began to export animal products instead of cereals. In 1881 the first cooperative dairy was established; and in the course of the ten years which followed about 900 cooperative dairies were created. Since the beginning of the century the number of cooperative dairies has increased as follows:

1900	1,029
1906	1,056
1909	1,157
1914	1,168

In addition to the 1,168 cooperative dairies there were in 1914, 335 private dairies; the total number of dairies thus amounted to 1,503. The

(1) See *International Review of Agricultural Economics*, November-December, 1915.

importance of private dairies in Danmark fell off in proportion as cooperative dairies gained ground ; about half of the 335 private dairies which existed in 1914 produced but little butter. The manufacture of butter for export is concentrated more and more in cooperative dairies.

In 1914, 166,000 or 90 % of the 182,000 Danish cow keepers supplied milk to the cooperative dairies ; the owners of these cow sheds kept about 85 % of the whole of the cows in Denmark.

It is chiefly dairy farms of medium size which join the cooperative societies, while a part of the very small ones and particularly the exceedingly large ones remain aloof from this movement. There are nevertheless several dairy farms both among the small and the big ones which have joined the cooperative dairies.

Each of the dairies of Denmark draws on an average 2,300,000 kilograms of fresh milk per annum ; there are but a small number of dairies with a quantity exceeding 6 million kilograms. The cooperative dairies are on the average larger than the private ones. Taken as a whole the average size of the dairies tends to increase. They employ in all 6,200 persons or about 4 per dairy. Among the persons employed 5,100 were men and 1,100 women. The women were mostly at the private dairies and city dairies. As regards the dairies engaging mainly in the production of butter, the number of women employed is decreasing while the number of men shows a heavy increase.

In 1914 there were in Denmark 1,300,000 cows, and the quantity of milk per annum is estimated at 3,500 million kilograms. The present investigations only cover about 3,300 million kilograms of milk, part of the milk being consumed direct by the households of the farmers and not going to any dairy. The annual yield of milk per cow was in 1914 about 2,600 kilograms, and on the average 25.6 kilograms of fresh milk is required to produce one kilogram of butter. The yield of milk per cow has shown an increase as time went on, and the quantity of milk required to produce a kilogram of butter has declined, the fatty contents of the milk being augmented. The following are the variations observed over a number of years:

Year	Yield of milk per cow	Quantity of milk required to obtain 1 kilogram of butter
	kilograms	kilograms
1899	2,161	26.3
1900	2,357	25.6
1906	2,566	25.6
1914	2,644	25.4

The reason of this increase, both in quantity of milk and of the fatty contents, is the use of more rational foraging methods and the more careful selection of breeding sires ; in both respects the cooperative societies have contributed substantially to the progress achieved.

The following is the quantity and the total production of the dairies of Denmark in 1914 :

	Quantity in thousands of kilograms	Value in thousands of kroner
	—	—
Butter	116,794	249,957
Cheese	15,534	7,203
Cream	20,024	15,972
Fresh milk	93,426	13,518
Skim milk and butter milk	2,818,873	59,079
Whey	180,061	913
Total		346,642

Of the 117 million kilogrammes of butter, about 95 million kilograms were exported. The consumption of home-produced butter in Denmark thus reached about 22 million kilograms. In addition about 2 million kilograms of foreign butter (principally of Russian or Swedish origin) were consumed. The consumption of foreign butter in Denmark was formerly more considerable.

The export of cheese reached only about 500,000 kilograms, and Denmark imported nearly as much. The cream is principally exported to Germany ; the export of cream in 1914 reached about 15 million kilograms, as against 29 million kilograms approximately in 1913. The decrease is due to the state of war.

The growing importance of the dairy industry of Denmark is the result of the increase in the quantity of production. The progress achieved from 1905 to 1914 is shown by the following figures :

	1905 Production in thousands of kilograms	1914 Production in thousands of kilograms	Increase %
	—	—	—
Butter	94,871	116,794	23.1
Cheese	15,280	15,534	1.7
Cream	10,959	20,024	82.7
Fresh milk	58,588	93,426	59.7
Skim milk	2,138,061	2,818,873	31.8

The value of the cream and of the direct sale of fresh milk shows the largest increase, but what is most important from the economic point of view is that the quantity of butter has increased by about one quarter

The total value of the dairy products amounted in 1914 to 347 million kroner. In 1905 this value was 267 million kroner ; the increase of value thus reached, in 1914, 90 million kroner, or about 30 %. This increment is due not only to the expansion of the quantity of products in 1914 but

also to the enhanced value of these products. The following are the prices for 1905 and 1914 :

	Average price per kilogram.		
	1905 öre	1914 öre	Rise %
Butter	192	214	11.5
Cheese	36	49	36.1
Cream	62	80	29.0
Fresh milk	12.2	14.5	18.8
Skim milk and butter milk	3.0	3.8	26.3
Whey	0.4	0.5	25.0

It is the price of cheese which has gone up most, but this increment is partly due to the improvement of the quality ; the greater dearness of the other products is due to the general tendency to higher prices in Denmark, as in other countries.

By far the greater portion of the fresh milk supplied to the dairies is used for butter making, but as only about $^1/_{25}$ of the weight of the milk is turned into butter, the rest forms bye-products, namely skim milk and butter milk. Likewise in the manufacture of cheese whey, forms a bye-product. These bye-products are usually not sold direct but are returned to the dairy suppliers, who utilise them. The cooperative dairies chiefly return skim milk, butter milk and whey.

In the following table the proportional quantities of the products of dairies are expressed in relation to 1,000 kilograms of fresh milk received by the dairies :

	From 1000 kilograms. of fresh milk the dairies produced in:	
	1905 kilograms	1914 kilograms
Butter	36.5	35.6
Cheese	5.9	4.6
Cream	4.2	6.2
Fresh milk	22.5	28,4
Skim milk and butter millk sold	43.3	46.2
Skim milk and butter milk returned to the suppliers	779.2	811.9
Whey sold	8.8	13.8
Whey returned to the suppliers	77.0	41.0
Total	977.4	989.7

The total figure does not amount to 1,000 because a small quantity of waste material is not included, but the shortage is only 1 to 2 % for the

two years named. It will be seen that the conditions under which production takes place are almost analogous in 1905 and 1914 ; nevertheless a slight growth in the output of cream and a larger direct sale of fresh milk are observed. From 80 to 90 % of the fresh milk received by the dairies is returned to the suppliers in the form of skim milk, butter milk or whey.

Information as to wages in the dairy industry relates only to cooperative dairies and one half of these alone ; nevertheless the results obtained appear to be truly representative of the general position. Everywhere the cooperative association of farmers which owns the dairy engages a manager who is paid a fixed price per year, and in addition receives certain allowances in kind : milk, cream, etc. ; he also has lodging, light and heat. He manages the entire business and himself pays for the assistance he requires.

The gross wages of dairy managers average 3,817 kroner ; from this there must be deducted the wages of the assistants, who, besides a remuneration in kind, receive food and lodging. The wages (wages in cash and value of food and lodging) of the all assistant hands at a dairy average 1,870 kroner, so that the net wages of managers average 1,947 kroner. To this must be added the value of the supplies in kind furnished to the manager in addition to the cash salary. The wages of managers moreover vary according to their age and the extent of the undertaking.

The wages of dairy assistant hands amount to 389 kroner per year for men and 266 for women ; this is increased by the value of the food and lodging estimated at 281 kroner. The total wage per annum thus amounts for men to 670 kroner, and for women to 547 kroner. It is observed that few hands are above the age of 30.

In addition to the practical training which they impart, more than three fourths of dairy managers give theoretical courses of instruction at the dairy schools. One half of the assistants above 25 years of age also possess this theoretical training, which is on the contrary comparatively rare in the women.

GREAT BRITAIN AND IRELAND.

AGRICULTURAL CO-OPERATION IN IRELAND.

SOURCES :

REPORT OF THE IRISH AGRICULTURAL ORGANISATION SOCIETY, Ltd., for the period from July 1914 to 31st March 1915. Dublin, the Sackville Press, 1916.

§ 1. INTRODUCTORY.

In the Bulletin for July, 1915, we gave an account of the progress of agricultural co-operation in Ireland up to the end of 1913, and at the close of the article we remarked that the outbreak of the European war had brought about a marked change in the problems of Irish agriculture in the solution of which co-operation would be likely to play an important part. This prediction is fully carried out by the facts set forth in the Report of the Irish Agricultural Organisation Society, which we will now analyse.

The Report deals with the period from 1st July 1914 to 31st March 1915, thus covering the first nine months of the war, the bearing of which upon the work of the Society, whose chief aim is to organise and thereby render more productive the industry that feeds the nation, is the only subject to which attention is specially drawn.

In his address to the twenty-first annual general meeting of the Society, its President, Sir Horace Plunkett, stated that the I. A. O. S. is now the largest agricultural organisation in the British Empire, and can point to 1000 aggregated societies, organised as the result of its labours, with a membership of some 100,000 farmers, transacting through their co-operative organisations business which amounted in 1915 to approximately £4,000,000.

War policy.— Impressed with the urgent need of increasing food production in Ireland, and availing itself of its exceptional opportunities for getting at the organised farmers, the I. A. O. S. instructed its organisers in the Autumn of 1914 to urge upon the local societies the importance of using their organisation for the purpose of enabling their members to secure increased yields. This policy involves a development of co-operative purchase of agricultural requirements and of cooperative sale of produce, including the bulking and regularising of consignements so that they may be carried more cheaply and marketed more expeditiously ; and, when these business

necessities have been attended to, a large number of labour-saving implements must be obtained. Where the rural communities consist chiefly of small farmers they must club together to purchase these, and when this is done, co-operative organisation is again found to be necessary for the use and care of these implements.

The procedure followed by the Society in its efforts in this direction is to send an organiser to a rural parish who begins by pointing out to the farmers the advantages to be derived from wholesale purchase of requirements. When he has acquired the confidence of the community by effecting for them a notable saving along these lines, he points out that no less an economy can be effected through the use of certain implements, which are beyond the means of the individual farmer but well within the means of the local Society as a whole. When the acquisition of these implements has been arranged, the organiser has next to devise a scheme by which the participants in the undertaking can have the use of the new equipment in proper rotation, and in such order as will get the greatest amount of work done, with due regard to the needs of the poo er members. Lastly, proper provision for the care of the implements must be made. Such organisation is the special function of the I. A. O. S., and when we remember that small farmers constitute 85 per cent. of the total farming population of Ireland, the importance of the work above outlined will be readily understood.

Always with a view to increasing production the Society has also done all in its power during the period under consideration to make known to the farmers and to extend the system of " continuous cropping " or " intensive tillage ".

In its anxiety to do all within its power in these directions, the Society was desirous that its organisers might work in collaboration with the experts of the Irish Department of Agriculture and with the Departmental Committee on Food Production in Ireland, and to this end it submitted definite proposals. The Report, however, has to state that its efforts in this direction failed.

Progress during the War. — The following figures show the relative positions of the societies affiliated to the I. A. O. S. in 1913 and 1914.

Year	N° of Societies.	Membership.	Turn-over	Average turn-over per Society	Average turn-over per member
			£	£	£ s. d.
1913	985	104,702	3,333,189	3,384	31 17 0
1914	1,023	106,212	3,668,958	3,586	34 10 0
Increase	38	1,510	335,769	202	2 13 0

To the above total must be added the estimated turn-over of Societies not making returns — 335 in number — which would be approximately £ 64,000.

We will now give a table showing the societies formed and dissolved during the 15 months from 1st January 1914 to 31st. March 1915.

Description of Society	Total at 31/12/13	Formed in 1914 and to 31/3/15	Dissolved in 1914 and to 31/3/15	Total at 31/3/15
Creameries	341	17	8	350
Auxiliaries (not separately registered)	89	6	—	95
Agricultural	193	33	4	222
Credit	235	2	4	233
Poultry Keepers	18	1	1	18
Industries	18	—	2	16
Pig and Cattle	52	—	2	50
Flax	10	—	—	10
Miscellaneous	27	1	1	27
Federations	2	—	—	2
Totals	985	60	22	1,023

§ 2. The societies.

Creameries. — The number of creameries on the I. A. O. S. register on the 31st March 1915 was 350 against 341 on the 31st December, 1913, eight ineffective societies having been removed from the list.

The Report points out that bacteriological examination has disclosed the fact that complaints as to bad keeping quality in butter are almost always due to contamination, often unsuspected, in the water supply. To obviate this source of danger, many societies are being advised to sink Artesian wells, and wherever this has been done, under the supervision and advice of the I. A. O. S., the results have been almost invariably such as to amply justify any expenditure incurred.

The problem of dealing with creamery washings and waste is still unsolved, but some hopeful and promising experiments are being carried out by a small body of private individuals entirely at their own risk and expense. It would seem that this would be a field in which State assistance would be justified.

A very interesting development which has taken place recently is that of making butter from pasteurised cream which has not been ripened. It is claimed for this butter that it will keep sweet and good much longer than butter from ripened cream, also that it has a much better body, while the produce, when modern churning plant is used, is equal if not superior to that of cream ripened and churned in the ordinary way.

The business of the creameries calls for much diligent research work in all its branches. No such work is being carried on in Ireland, and it seems hopeless to ask for it. This being so, it would seem that the co-operative creameries should themselves subscribe the necessary funds for equipping a suitable laboratory and placing it in charge of a properly qualified person.

Winter dairying has made little advance and it need not be expected that it will until the members of dairy societies take up continuous cropping which appears to be the only economical way of producing milk in winter.

Cow-testing is not being adopted systematically, neither is it being kept up where it has been started. On the other hand, the Report is able to state that the Butter Control Scheme is now beginning to work satisfactorily.

Agricultural and Implement Societies. — On 31st March, 1915, 222 such societies were registered showing a net increase of 29 in fifteen months. More confidence is felt now about these societies than there has been ground to feel before. Agricultural societies now own threshing sets with steam and oil engines, motor tractors for haulage and tillage, grinding mills, reapers and binders, ploughs, harrows of various types, horse and hand sprayers, manure distributors, potato-diggers, weighing machines for pigs and cattle, etc. These activities are general, but most progress would appear to have been made in certain districts in Connaught and Munster, where the farmers seem to have realised more fully than elsewhere the advantage of possessing up-to-date machinery and the great economy effected by purchasing and owning it co-operatively. The agricultural societies are also gradually building up a considerable trade in feeding stuffs.

Bacon Curing Societies and the Meat Industry. — The magnificent results obtained by Danish co-operators along these lines point to pig breeding and bacon curing as one of the most profitable fields for co-operative enterprise in agriculture. The bacon curing industry should always prosper as an auxiliary to the co-operative dairy, for there is no better food for pigs than skim milk and no better prices are procured than those paid for it by the societies. The bacon factory run in connection with the Achonry co-operative creamery is an instance of the successful combination of these two industries. It pays excellent prices to the feeders, supplies cheap and wholesome food, and furnishes an admirable use for the skim milk of the district. Moreover, the refrigerating plant owned by the creamery made further outlay in this direction unnecessary, so that the total outlay on building and equipment did not exceed £100.

The Report notes that in Ireland the tendency now is to combine bacon curing with other branches of the meat industry. On this head interest centres upon the efforts of the Wexford co-operative society, which handles cattle, sheep and pigs, and has been the means of placing its members in an absolutely independent position in regard to the sale of their fat stock. A by-products department has been organised and installed and out of the raw material, some of which would otherwise be waste, the society is producing fertilisers, refined beef suet, oleo oil, stearine, soap, etc. The guts are made into sausage casings for export, and other manufactures

of the Society include pork pies, brawn, polonies, puddings, sausages, tongues etc. etc.

Credit Societies. — No important increase in the work of these societies can be chronicled during the year. Membership remains about the same. The total capital shows an increase of about £1000, the loans granted a decrease of £2,500 in amount and between 500 and 600 in number. This is due to the conditions arising from the war which have led the Department of Agriculture to withdraw their loans from all these societies and the Congested Districts Board to recall most of their loans also. In so far as the work done by these societies is sound and useful the capital should be found chiefly by the farmers themselves in the form of deposits. The figures available for the Report show that movement has been in the right direction. About 60 per cent. of the total capital used by these societies in 1914 was furnished by deposits and 40 per cent. by joint stock banks and the State. A few years ago the proportions were the reverse of this, forty per cent. for deposits, sixty for the loan capital. This fact may well be accepted as evidence that local confidence in the stability of these societies is growing.

In many cases it is clear that the withdrawal of Government loans will be a blessing in disguise, evoking from the people a spirit of self-reliance and resulting in an increase of deposit capital.

Many of the blemishes found in the working of the less satisfactory societies continue. Some having no real life in themselves will almost inevitably cease with the repayment of the State loans. Their lesson to co-operators is that credit societies should not rely upon capital provided exclusively from public funds. On the other hand, the societies which were doing well before the war are now doing better.

The Central Co-operative Credit Society is limiting its work mainly to that of an intermediary between societies with an excess of deposit capital and others which need more loan capital. In view of the withdrawal of State loans the policy of the movement in regard to this branch of co-operative work requires the fullest attention not only of the Central Co-operative Credit Society but of all co-operators, and the establishment of a Central Credit Bank will no doubt demand the attention of the I. A. O. S. before long.

§ 3. The financial outlook.

Under this heading the Report calls the attention of the organised farmers to their duty to contribute through their local societies to the Central Organisation. Under present circumstances it is proper that help from public sources should be limited to that required for organising the agricultural industry in fresh directions and for the further extension of the movement. Wherever co-operative societies have been firmly established, they should be self-supporting and should contribute adequately to the support of their Central Union. It is pointed out that farmers, almost alone of all

classes, are benefitting financially by the war, and the Irish farmers can if they will make the I. A. O. S. self-supporting. As was to be expected, contributions from private sources show a serious decline, and the contributions of the societies, while they show an improvement as compared with the previous year, are not yet what they should be. The Report bluntly says " The movement must realise now that if it wants a central body it must pay for it, for nobody else is going to find the money ".

The grant to the I. A. O. S. of nearly £ 5,000 from the Development Fund has been continued.

§ 4. Insurance.

The I. A. O. S. is also an active worker in the field of co-operative insurance ; no progress, however, can be reported in the insurance of live-stock. Attention is called to the extreme importance of having all officers responsible for the money and property of their society bound by guarantee, the simplest plan being to have the risk covered by fidelity guarantee insurance, a branch of work in which the Co-operative Insurance Society specialises at favourable rates. This same society insures co-operative dairies and so forth against loss by fire.

A new departure for the I. A. O. S. has been a scheme of war and marine risks insurance, which it has instituted with Messers Frank Gibson-Lloyd & Co, to cover the increasing risks arising out of the war to produce shipped by the co-operative societies. 65 societies had availed themselves of this insurance in September 1915, at which date the Report was drawn up. This scheme was only started in April 1915, that is to say subsequent to the period covered by the Report. The rate of insurance varied from month to month and in October 1915 had fallen to 7s. 6d. per £ 100 for combined war and marine risks.

§ 5. Auditing.

The following is a summary of audits carried out by the I. A. O. S. staff during the year ended 31st December, 1914 :

Creameries	97
Agricultural Societies	78
Credit Societies and Agricultural Banks	157
Poultry Societies and Miscellaneous.	14
Total . . .	346

The total number of audits in 1913 was 331. The earnings of the department in 1914 amounted to £ 1,017 as compared with £ 934 in 1913. Inspections and instructions and statistical work are not charged for.

§ 6. Conclusion.

That the growth of the business done by the co-operative societies since the commencement of the movement in 1889 shows constant and encouraging progress is clearly shown by the following tables with which we will close this brief review of the work of the Irish Agricultural Organisation Society.

Summary of Statistics, 1914.

	No of Societies	Membership	Paid up share capital	Loan capital	Turnover	Affiliation fees	Subscriptions
			£	£	£	£ s. d.	£ s. d.
Dairy societies	350	47,086	149,755	133,210	2,731,628	829. 8. 6	746.10. 5
Auxiliary societies	95	—	—	—	—	—	—
Agricultural societies . . .	222	21,155	11,343	46,708	197,146	134. 8. 6	83. 8.10
Credit Societies	233	20,340	—	56,271	52,926	38. 6. 6	50.16. 2
Poultry Keepers' societies .	18	4,352	1,642	2,117	65,487	27. 0. 0	10. 0. 0
Home industries societies .	16	910	998	1,682	2,234	—	—
Miscellaneous (including bacon curing & bee-keepers)	27	9,880	27,262	16,665	187,826	21.17. 0	5.10. 0
Pig & cattle supply societies	50	1,818	260	—	—	—	—
Flax societies	10	463	705	2,930	2,328	2. 1. 0	4. 4. 0
Federations.	2	297	10,148	26,050	429,383	10. 0. 0	—
	1,023	106,301	202,113	285,633	3,668,958	1,063. 1. 6	900. 9. 5

Trade Turnover of the Societies since the Commencement of the Movement.

Year	Number of Societies	Butter Sales	Banks. Total loans granted	General Turnover	Total Turnover
		£	£	£	£
1889	1	4,363	—	—	4,363
1890	1	8,500	—	—	8,500
1891	17	50,382	—	—	50,382
1892	25	98,969	—	—	98,969
1893	30	140,780	—	—	140,780
1894	33	151,852	—	—	151,852
1895	76	184,947	—	—	184,947
1896	104	377,695	388	57,822	435,905
1897	148	322,344	475	76,134	398,953
1898	243	401,771	3,306	270,346	675,423
1899	424	572,963	5,550	331,874	910,387
1900	477	703,826	7,270	327,781	1,038,877
1901	564	809,144	10,357	363,079	1,182,580
1902	706	885,892	16,480	340,175	1,242,547
1903	840	964,066	20,435	406,546	1,391,047
1904	778	1,089,620	31,742	410,958	1,532,320
1905	835	1,195,486	43,641	238,411	1,477,538
1906	873	1,457,040	50,264	307,145	1,814,449
1907	913	1,574,083	53,112	390,428	2,017,623
1908	881	1,666,596	56,004	529,780	2,252,380
1909	835	1,757,969	57,640	578,869	2,394,469
1910	880	1,903,334	55,855	630,370	2,589,559
1911	934	1,908,314	56,055	702,114	2,666,483
1912	947	2,268,902	58,244	878,043	3,205,189
1913	985	2,323,441	55,492	54,256	3,333,180
1914	1,023	2,502,545	52,926	1,113,487	3,668,958
		25,324,824	635,236	8,907,609	34,867,669

RUSSIA.

POPULAR COOPERATIVE CREDIT

(Concluded).

§ 11. The assets of the cooperative societies.

The aggregate working capital of the cooperative societies, with the exception of a small portion appropriated to form a reserve fund, lies idle in the hands of the institution, as a necessary result of its mode of operations, and serves exclusively for the granting of loans to the members. The amount of such loans grows year by year, pari passu with the increase of the working capital. Thus, loans had been granted by all the popular loan institutions together for the sum of

107,700,000	roubles	at the	1st January	1906
524,700,000	»	»	»	1913
662,400,000	»	»	»	1914

In the course of 8 years the total of loans has increased more than six-fold, and the aggregate loan movement in the course of a year exceeds the total debts of the members at the end of the year by the amount by which the assets and liabilities are balanced.

The following table shows the increase in the total of credits opened during the three years 1912-1914 in the various popular loan institutions:

Nature of Institution	1st January 1912			1st January 1913			1st January 1914		
	Total of operations roubles	Total of loans granted to members roubles	%	Total of operations roubles	Total of loans granted to members roubles	%	Total of operations roubles	Total of loans granted to members roubles	%
Cooperative credit societies	134,038.0	116,592.0	86.9	213,411.7	184,527.2	86.5	304,931.9	263,167.2	86.3
Loan and deposit funds	209,402.0	171,706.0	82.0	255,323.3	212.750,0	83.3	309,338,3	254,703.9	82.3
Non-cooperative funds	87,191.0	79,951.0	92.7	98,103.5	90,013.9	91.8	—	—	—
Zemstvo funds	28,034.2	21,571.0	76.9	45.175,9	37,725.4	82.9	66,287.8	54,789.1	82.2

The ratio between the credits allowed to members and the total of loan operations fluctuated between 85 and 88.5 %. The number of members to whom loans were granted is 60 to 70 % of the total of members in the cooperative credit societies and 83 to 89 % in the deposit and loan societies ; the latter have therefore a higher proportion of debtors, which is to be attributed partly to the ampler means at their disposal and partly also to the fact that they grant loans for longer terms.

It is likewise observable, for the same period, that there is a growth in the number of loans granted to associations, and also in the number of cooperative societies opening credits to the latter.

Thus in 1911 we have 39 cooperative credit societies supplying funds to 1388 associations.

In 1912 we have 811 cooperative credit societies supplying funds to 2718 associations.

In 1912 we have 397 loan and deposit funds supplying financial accommodation to 1294 associations.

The *zemstvo* funds would be well adapted for this class of operation,

Passing on to deal with the average amount of the loans, it must be noted that it varies considerably in the Empire. Greatest in number are loans of 50 roubles, which form 64 % of the total in the Government of Poltava, and 87 % in that of Riasan ; the aggregate total formed by these loans however is not great. Loans of 100 roubles fluctuate between 13 and 44 % of the total number of loans.

Generally it is observed that the average amount of the loan is greater in the loan and deposit societies, where it reaches 145 roubles, than in the cooperative credit societies, where it does not exceed 56,6 roubles.

The average of the debt contracted by the members of the former moreover is less than their share in the working capital ; the contrary is the case in the cooperative credit societies.

This appears clearly from the following table :

	1911		1912	
	Average of debts	Share of working capital	Average of debts	Share of working capital
Deposit and loan funds.	143.4	148.2	148	150
Cooperative credit societies	48	34	41	40

In the northern regions (such as Olonets and Viatka), the industrial ones (such as Tver and Nijni-Novgorod) and the central ones (such as Voronege and Tamboff), which are generally poorer in working capital, the average loan per member is lower ; it is higher on the other hand in the richer

regions, such as those of the south (Poltava and Bessarabia), the Northern Caucasus (Kuba and Stavropol), the Baltic and the kingdom of Poland.

The loans are granted to the members exclusively for purposes of production, that is, in order to increase the productivity of their lands and to create new economic values (purchasing draught animals, seeds, etc.). With observance of these rules it is afterwards found easy to pay off the debt without hindrance to the proper operation of the farm.

Unfortunately, however, it proves very difficult in practice to keep strictly to these rules always. It is in particular impossible, however desirable it might be, to satisfy oneself whether the loan has really been employed for productive purposes as it was intended, where it is a question of a large society having more than 1000 members and covering several villages, apart from the fact that it is not always easy to determine when the object is to be deemed productive or not.

Nevertheless the cooperative societies always endeavour to eliminate these difficulties. Thus, in 1912, the loans for productive purposes formed 87 or 88 % of the loans, while those for consumption did not exceed 11.6 % in the credit societies and 12.8 % in the deposit and loan societies.

The loans are divided according to their purpose, thus :

Purpose of use	Deposit and loan societies %	Cooperative credit societies %
Agriculture	92.2	76.8
Domestic industries	13.0	5.3
Trade	14.3	5.6
Various agricultural purposes	0.7	0.7
Consumption	12.8	11.6
	110	100

The average period of the loan in the credit societies is 10 months and in the deposit and loan societies 9 ½ months. The debt is usually paid off in proper time. The practice of proportioning the period to the amount of the loan is not very widely adopted as yet, either on grounds of convenience or because this practice is not well known.

Administrative methods prevail. The result is that the member does not enter into closer relations with his society ; he considers it only as his bank. Loans repayable by instalments are but little practised as yet. The percentage of the loans unpaid at maturity did not, in 1912 in the credit societies, amount to 3.3 %, and for the deposit and loan societies it fluctuates between 2.5 and 10 %. The percentage is determined not only by causes of a general character but principally by the result of the harvest, especially when the fluctuations are greatest.

The grant of the loan is made on the basis of the confidence enjoyed by the member (personal credit in the strict sense of the word) or on the guarantee of other members or third persons (personal credit in the wider sense).

This form of guarantee applies to the cooperative societies to the extent of 71 % and to the deposit and loan societies in 17 % of the cases. Advances for real property purposes on the security of movable property are relatively little in vogue, still the loans on this security attain 100 million roubles.

The most frequent article of pledge is the movables or personalty, chief among them being agricultural implements and cattle ; those however which are needed by the debtor are left in his custody.

The pledge of crops is not much resorted to, being hindered by rural custom and the technical difficulties of the operation, particularly with cooperative societies, which usually do not have warehouses of their own. At the 1st January 1913 the State had granted 127 cooperative societies 441,200 roubles for the construction of granaries, a poor sum indeed, but to be viewed as the first step in this direction. Much remains to be done in this department by the cooperative societies, but in any case this beginning promises much, if material aid and technical organisation on the part of the Government does not fail. Storehouses (elevators) for the keeping of grain now under construction by the Government represent another step forward in this direction (1).

§ 12. Purchase and sale of agricultural produce through the agency of the societies.

The rate of interest on loans is generally very high ; for the credit societies the average in 1910 was 13.3 %, and for the deposit and loan societies 9 %, while for those in the Baltic provinces it was limited to 7 ½ %. From what was said in reference to the interest paid by credit institutions on their capital, it might justly have been inferred that the interest was necessarily very high on their capital invested in loans. According to the annual accounts for the popular credit institutions for 1912, this interest, although high, should not be very onerous to the debtors, while it afforded the institutions the possibility of establishing their operations on stronger economic bases.

We may now say a word likewise about loans in kind, which must be regarded as a modified form of loans in money. By them the society provides its members not with money but with goods or products.

(1) See in the *International Review of Agricultural Economics*, III, 1914, the article: "Loans granted by the Imperial Bank on the security of grain and the construction of cooperative store-houses for grain in Russia ".

The cooperative society, when it has a large number of goods at its disposal, enters (or to be more accurate, is enabled to enter) into direct relations with the producers, doing away with the middlemen, and is also in a better position to guarantee the quality of the goods (making the factory likewise a guarantor) and obtain them at very reasonable prices.

All these advantages naturally go to benefit the members, quite apart from the consideration that the latter enter into much closer relations with the society, and the bond uniting all the members becomes much more powerful.

This operation however requires on the part of the society a great deal of work, some experience in commercial matters, and a good knowledge of market conditions ; all of them qualities which unfortunately are very rarely met with among cooperatives societies.

For these reasons the collective purchase and sale of agricultural produce is but little practised as yet. According to law, the purchase and sale of agricultural produce must be exclusively for account of the members ; the society may only conduct these operations for its own account by using the special capital existing for that purpose, and not the other working capital.

In practice the cooperative societies have pursued the three following courses (or rather endeavoured to pursue them) in their operations as middlemen :

1) To buy for own or members' account ;

2) To buy on commission for firms or traders or the *zemstvo ;*

3) To act for account of cooperative societies.

1) The first form is still in its infancy. The peasant still feels no confidence that the products ordered by him from the society and furnished by the latter are really cheap and of better quality than those bought by him direct. To this difficulty is added that of selecting the right moment for ordering the goods.

2) The deposit of goods with the cooperative societies for sale at the most opportune moment. This form of operation is no more developed than the preceding one. A single society does not have so much capital as to be able to establish direct relations with the big firms ; this could only be done by a union of societies. Unfortunately, however, these unions in Russia are few and far between (1). The *zemstvos*, furthermore, which carry on many operations from this point of view, are not willing to hand over this class of operations to the cooperative societies, in order not to break the bond which unites them to the rural population.

3) The amounts in hand, available for use, of the special capitals of the cooperative societies are limited by their smallness and the impossibility of increasing them to any notable extent by the profits as the law requires.

In spite of all these difficulties it would appear that these operations

(1) As to their organisation and activity see : " The Federations of Cooperative Credit Societies in Russia in 1913 ", Bulletin No. II, 1914.

as intermediaries between the member and the producer are likely to undergo further development.

In the period 1905-1911 the cooperative societies expended in this class of operation :

	Year	Sums intended for the purchase of products or proceeds from the sale of products of members (thousands of roubles)			Goods bought and sold (Thousands of roubles)			Number of cooperative societies engaged in this class of operations
		Receipts	Expendit.	Balance	Purchases	Sales	Surplus	
Deposit and loan banks	1905	113.7	125.5	2.5	121.2	120.6	33,9	33
	1908	200.8	223.1	93.0	748.8	712.8	181.4	93
	1909	698.6	611.0	102.0	1.258,0	1,137.8	306.8	124
	1910	828.3	850.9	78.7	1,985.5	1,892.1	402.3	240
	1911	938.3	853.5	163.6	2,843.1	2,630.8	616.1	344
Cooperative credit societies	1905	241.4	232.5	13.4	244.4	187.0	64.3	84
	1908	723.8	709.9	39.4	2,096.7	1,016.6	515.5	548
	1909	1,260.4	1,229.8	67.0	2,787.3	2,654.6	644.2	755
	1910	1,427.7	1,359.2	134.7	4,616.0	4,152.4	1,095.0	1,094
	1911	2,189.9	2,101.9	227.3	6,809.0	5,914.1	2,003.9	1,698

Hence at the 1st January 1911 there were already 1334 cooperative societies in operation in this department turning over a capital of 17 million roubles, or 1.6 % of the total capital of the cooperative societies; at the 1st January 1912 this number had risen to 2042 and the business turnover to 24 millions.

The credit societies are those which most readily engage in these operations, especially in the south of the Empire, in the governments of Kherson, Kharkoff and so on.

Among these middlemen operations there may also be enumerated the collective lettings of lands and purchase of small woods. The former are practised in several governments, particularly in the south, as for instance in those of Tauride, Kherson, and Bessarabia, apparently with good results as it diminishes the competition between the various tenants and eliminates the middlemen.

The same may be said of other similar operations, which are however unimportant both in number and amount.

§ 13. Profits and losses of the cooperative societies.

We will now give a survey of the profits and losses of the cooperative societies.

The total profits of the whole of the cooperative societies were in 1911:

The credit societies	16,726,400 roubles
The loan and deposit societies . . .	17,528,100 »

The profits on loans were in the same year :

Credit societies	15,306,300 roubles
Loan and deposit societies	15,506,400 »

The proportion of the profits to the aggregate of loans granted amounts:

For credit societies to	9.4 %
For deposit and loan societies to . .	7.3 %

The number of societies which closed the financial year with a profit is between 89 and 96 % of the total of these institutions. The amount of the net profits grows almost uninterruptedly, and varies per society and per member in the credit societies and deposit and loan societies according to the different nature of the working capitals and the manner in which the latter were formed. This appears clearly from the following table :

	Year	Total number of Societies	Number showing a profit	Proportion between the first and the second %	Total of profits thousands of roubles	Average profits	
						per society (roubles)	per member (roubles)
Deposit and loan Societies	1905	877	831	95	2,314.5	1,582	3.43
	1906	902	833	91.2	1,514.6	1,840	3.41
	1908	1,474	1,369	92.9	2,264.5	1,654	3.49
	1910	2,134	2,033	95.3	3,576.3	1,759	3.44
	1911	2,593	3,492	96.5	4,920.8	2,033	3.62
Credit Societies	1905	536	499	93.1	223.3	448	—
	1906	1,109	1,099	91.7	573.0	521	—
	1908	2,691	2,392	88.9	1,356.1	566	1.18
	1910	4,545	4,294	94.5	3,285.6	764	1.44
	1911	5,940	5,718	46.3	3,821.4	1,818	1.73

The years 1910-1911 were prosperous for cooperative societies in general, because the net profits were :

For the credit societies . . . . . 500 roubles per society
For the deposit and loan societies . . . . 1000 » » »

The maximum net profit earned by a society was 19,000 roubles (Government of Poltava).

The distribution of the profits is not left to the discretion of the administrative officers but is laid down by the bye-laws.

In the credit societies 40 % of the net profits must be set aside to account of initial capital, 20 % (not less) to the reserve fund ; in actual fact however the proportions are even higher. In 1910 the credit societies appropriated to initial capital, reserve fund and special capital 88.7 % of the profits, and the deposit and loan societies 59,6 %.

The following table contains detailed particulars as to the division and use of the profits in 1911.

Institutions and figures	Sums paid			Sums allocated for					Total of net profits
	To initial capital	To reserve fund	To special capital	Remuneration to administrators	Purposes of common utility	Cultivation purposes	Unspecified purposes (1)	Bonuses to members	
Cooperative credit societies — absolute figures . . .	2,463,962	1,380,476	1,321,324	253,667	32,194	26,954	342,785	—	5,821,362
Cooperative credit societies — relative figures % . .	42.3	23.7	22.7	4.4	0.6	0.5	5.8	—	100
Deposit and loan societies — absolute figures	1,079,228	603,875	1,038,265	403,836	85,698	33,508	816,506	889,857	4,920,77
Deposit and loan societies — relative figures % . .	21.3	12.3	21.1	8.2	1.7	0.7	16.6	18.1	100

(1) Partly carried forward to assets of 1912.

As will be seen, in addition to the substantial sums allocated to the different classes of capital, the profits also served to pay very high dividends up to 18.1 % on the members' contributions of the deposit and loan societies. Very modest on the other hand are the amounts devoted to purposes of general utility or cultivation, i. e. barely 1,1 % for the cooperative credit societies and 2.4 % for the deposit and loan societies. Under these designations very varied purposes are comprised, for instance, medical assistance, agricultural purposes, measures against fire, opening of post offices, schools, libraries, etc.

As regards the losses of the societies, it is sufficient to cast a glance at the following table in order to learn their amount and the number and percentage of societies which sustained them in 1904-1911, with the average loss per society and per member :

	Year	Total of societies	Number sustaining losses	Proportion between the first and the second	Total of losses	Average	
						Per society	Per member
Credit Societies . . .	1904	596	37	6.9	7,302	197	—
	1906	1,119	100	8.3	47,359	474	—
	1908	2,691	273	10.1	147,568	540	1.26
	1910	4,575	237	5.2	155,038	654	1.59
	1911	5,940	207	3.5	150,552	727	1.59
Deposit and loan societies	1904	877	44	5.0	35,983	818	2.97
	1906	902	79	8.8	132,889	1,682	4.65
	1908	1,474	90	6.1	101,631	1,129	3.68
	1910	2,134	90	4.2	291,220	3,236	11.39
	1911	2.593	93	3.6	154,337	1,660	5.13

The falling off in the total losses begins with 1907 for the deposit and loan societies and 1909 for the credit societies, but they are never below 500 roubles for each institution. To cover them the profits were used, but the credit societies had furthermore to make calls on members' contributions.

The losses are furthermore only temporary, because as soon as a more expert administration is formed and a thorough revision of operations takes place a reduction in losses follows at an early date. These losses are chiefly due to want of good management and capable employees to supervise the operations of the society and devote themselves conscientiously to their work. 42.2 % of the losses sustained by the credit associations and 33.3 % of those of the deposit and loan societies must be put down to this cause exclusively. Full praise must therefore be given to the Government, which of late years had devoted special care and great energy to the supervision and inspection of popular credit institutions, making use of the body of inspectors created specially for this purpose.

The managers of the societies, it is necessary to note, find that administrative supervision and surveillance over these bodies are excessive, and would prefer these tasks to be entrusted to the officers of the Federations of societies, being afraid otherwise that the fundamental principles of co-operation i. e. individual initiative and independence, may fail to obtain recognition. The action of the Government must certainly be approved in so far as it materially assists the societies, but this aid should be considered

as a banking and commercial operation purely and simply, and should have no other consequences.

Furthermore, let the Government indeed send its inspectors, but as "good friends and advisers, not as superiors (Nachalniki)". The Government on its part believes itself to be quite within its rights in inspecting the societies, not only because it has granted them funds, but also, and in still greater degree, because it is a question of the savings of the poor people, the small peasants, and the welfare of the entire population.

It will be seen that there are here two interwoven and partly opposed principles, so that the directing line in practice should certainly be their resultant. Otherwise conflicts would be inevitable, and those who attempt to sail between Scylla and Charybdis will risk running on the rocks.

§ 14. Recapitulation and conclusion.

Let us now throw a retrospective glance over the entire development of Russian cooperative societies.

We see that at the outset, towards 1870, they spread rapidly, assisted by the sympathy of all social classes, but that afterwards, in the following decade, the movement slowed down and only resumed vigour towards the end of the century. From that time onwards they developed with surprising rapidity, not only in number but also in quality.

As their general characteristic it may be said that they successfully fulfil their useful work, which is always growing in extent and importance. The guiding principles in their credit operations show a wise direction and a capable adaptation to the manifold conditions of the vast Empire, where they devote themselves to the good of the people, doing silently and modestly the work of missionaries and helpers.

It should be no ground for surprise however, in view of the vastness of the Empire, if there are still many things requiring correction and alteration.

If, finally, every economic principle reduces itself to the obtaining of the greatest effect with the minimum effort, we may well say that popular cooperative credit in Russia, with the scanty means at its disposal, has already obtained great results. There are now already in existence the conditions required for a prosperous development of cooperation in the Russian Empire.

SERBIA.

RURAL CO-OPERATIVE SOCIETIES.

OFFICIAL SOURCES:

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INTRODUCTION.

The first rural co-operative society was founded in Serbia in 1894. In addition to causes of a general character which retard the creation of rural societies as compared with urban ones (as, for instance, the lower average level of education, the want of capital, the scarcity of capable administrative officers), the creation of rural co-operative societies in Serbia was likewise held back by two special reasons deserving to be brought into prominence: 1) the prevalence, until the second half of the last century, of the primitive natural system of economic organisation of the countryside and 2) the identification of economic assets and possessions with the community of the family. The families were often very numerous, at times numbering 50 and more persons.

It is at once evident that an environment of this kind was not the most adapted for the formation and operation of co-operative societies. Private production is found sufficient for the satisfaction of the farmer's own needs and he can form no idea of the tribute he would have to pay to his suppliers in the event of his being compelled to buy the goods he requires on the market. Therefore he feels no necessity to seek relief by the creation of cooperative societies of consumers; furthermore, under a natural system of agricultural economy and with extensive cultivation, the importance of capital is relatively inconsiderable, and consequently the need for creating co-operative credit societies is less felt. In the same way there is no strong incentive to the creation of co-operative societies for production and labour, the former already presupposing a condition of partial industrialisation of agriculture (co-operative wine manufacture and dairying) and the latter a large body of labourers without land. The creation of rural co-operative societies only became possible by the alteration of the economic environment, due in turn to changes in the above system of family economy in the second half of the last century.

In order to fulfil the many tasks incumbent upon it, the new State was compelled to place a heavy burden of taxation on its subjects, and the latter being nine-tenths agriculturists, the returns of agriculture were the first to feel the weight of the financial measures. For the first time, therefore, the farmers were under the necessity of producing and selling more than they had done till that time. To this is due the greater development in the relations between the countryside and cities, and the slow transition from the natural to the monetary economic system, and consequently the slow but sure breaking up of the family community. In the natural economic system the fundamental idea is that of the collective property of the family community, the several members only having the right of use and enjoyment. In the monetary system, the fundamental idea is that of individual property. This development is in turn accelerated by the growth of commercial relations between Serbia and other European countries, due in particular to the construction of the railway Vienna-Belgrade-Nish-Sofia-Constantinople and Nish-Salonica, which at last brought Serbia into communication with Western Europe.

The greater production which became necessary called for the investment of larger capital in agriculture. In order to provide this under the most favourable terms to the farmers, the first rural co-operative societies were created. The latter were therefore, here as everywhere, co-operative credit societies; and to-day the number of co-operative credit societies still far exceeds the number of all the other co-operative societies together.

The co-operative credit societies are of two classes:

I) Those societies which engage exclusively in credit operations;

II) The mixed cooperative credit societies which also undertake collective purchase of goods for their members or the sale of their members' produce.

The other co-operative societies (of consumers and producers) are exceedingly few.

§ 1. Cooperative credit societies.

Organisation. — All the co-operative credit societies in Serbia are of the Raiffeisen type. Their characteristics are as follows :

(*a*) The members are jointly liable without any limitation towards third persons and each equally with the other among themselves.

(*b*) The sphere of action is restricted and clearly defined, corresponding usually to a village or commune.

(*c*) There is no society capital and the members do not pay or possess any obligatory contribution or share. Only in case of necessity are the members called upon to pay in the so-called " compulsory savings deposits "; the general meeting of the members decides as to the necessity, the amount and the duration of these deposits, etc. ; the usual payment is 50 centimes or one franc per month. These deposits represent the debt of the co-operative society towards its members, to whom it allows interest at 4 to 6 %. With regard to the repayment of the deposits the general meeting decides. If a member ceases of his own free will or by resolution of the board of directors to belong to the society, his deposit is immediately refunded to him.

(*d*) No dividend is distributed to the members, and all the net profits are put into the reserve fund. The reserve fund is regarded as belonging to the co-operative society as a body corporate ; therefore in the case of dissolution of a society its reserve fund is not distributed among the members but deposited with the Central Co-operative Credit Society where it remains until the formation in the same district of a new cooperative society, which becomes ipso facto entitled to such reserve fund.

(*e*) The loans are granted to the members only and for agricultural purposes alone, which must be declared in the application ; the actual use of the capital lent is verified by the society.

Working capital. — In addition to the compulsory savings deposits, which represent the principal sources of capital, and besides the reserve fund, the co-operative societies have the following means at their disposal :

(*a*) Ordinary savings deposits : These deposits are optional and are accepted from members and non-members. The maximum and minimum amounts which may be deposited are fixed by law (1-2000 fr.) and the general meeting fixes the maximum amount of the aggregate deposits. The interest allowed is 4-6 % ; up to ten francs withdrawal is at sight, beyond ten francs notice varying from 15 days to 6 months is required.

(*b*) " Scholar " deposits, so termed not in reference to the age or status of the depositor, but in view of the amount of the deposit and the way in which it is made. These are likewise optional and are accepted from both members and non-members.

The system in use is the English one, that is, by postage stamps. The minimum amount is 5 centimes and the maximum 2000 francs. The

interest allowed is 4-6 % ; withdrawal is at sight or subject to notice, according to the amount of the deposit.

(*c*) Credits : under article 78 of the law passed in 1899, the credit societies can only contract loans from the Central Co-operative Credit Society. It is the general meeting which decides as to the need for the loan to be contracted and its amount. The maximum is however fixed by law. The interest paid by the co-operative credit societies on the capital advanced is 5 %.

Grant of loans. — According to the provisions of article 62 of the law of 1899, the Co-operative credit societies can only grant loans to their own members and on the following conditions :

(1) The existence of an adequate guarantee. This may be either personal (the borrower and two other members as sureties) for personal advances ; or in the shape of security (goods, stocks, articles of value). When delivering over the latter the borrower is bound to hand in a written declaration authorising the society to sell the things given as security if he should fail to meet his engagements towards the society.

(2) The loans must be granted for productive purposes exclusively (except in bad harvest years) and the borrower is bound to specify in the application the purpose for which he requires the loan. The co-operative society exercises the necessary supervision to satisfy itself that the sums granted are really used in the manner stated. In case of infringement the society has the right to require immediate repayment of the capital lent, and the power to expel the infringing member from the society.

(3) Article 64 of the law of 1899 fixes the minimum and maximum amount of the loans as from 5 to 500 francs. By virtue however of article 48 the general meeting is empowered to reduce the maximum amount to a lower figure. This has very often been done during the first years of operation.

(4) The term for which the loans are granted ranges from a minimum of one month to a maximum of two years, loans at two years being much more usual than the others. By way of exception (bad harvest or harvest failure), the time of repayment may be extended for six months or a year. The repayment of long date loans is effected by quarterly instalments.

The borrower has the power to refund the loan before the due date without previous notice, but cannot be compelled to repay in advance except in extraordinary cases, as for instance if he should make a different use from that declared in the application of the capital obtained ; if his material position should, for certain reasons, give rise to apprehension as to his ability to refund the sum obtained ; if there is a run on the society for withdrawal of the ordinary savings deposits ; and if the borrower should cease to be a member of the society.

All the loans bear interest at 7 %. The following table shows the operations of the co-operative credit societies for the ten years 1902-1911 :

Year	Number of Societies	Reserve Fund	Compulsory savings deposits	Ordinary savings deposits	Loans contracted from central Cooperative Societies	Loans granted to members
1902	328	—	412,273	148,024	81,363	556,926
1903	397	—	518,645	181,484	110,344	716,111
1904	490	—	648,732	273,213	190,206	948,598
1905	542	—	831,983	298,036	225,595	1,192,834
1906	585	—	1,001,746	358,137	331,882	1,488,390
1907	589	—	1,143,751	427,322	394,753	1,670,756
1908	607	135,051	1,307,622	563,379	430,004	1,912 652
1909	615	141,606	1,406,561	537,921	369,948	1,969,448
1910	616	153,217	1,530,303	586,943	432,353	2,243,381
1911	638	179,016	1,755,527	718,713	556,897	2,640,529

Other operations (*mixed co-operative societies*). — We have already pointed out that some cooperative credit societies likewise carry out functions proper to societies of consumers, as for instance the wholesale purchase of goods and retail sale to members.

Such purchases as a rule are confined to articles indispensable for agricultural production (implements, seeds, working stock, etc.), the purchase of goods for consumption (salt, sugar, petroleum, etc.) being very rare. The sale to the members is at cost price, plus incidental expenses. The profit realised, if any, is not distributed but added to the reserve fund. The sale of goods for consumption is for cash only, but the other sale (implements, etc.) may also be on credit. There are very few co-operative credit societies who sell the agricultural produce of their members. Statistical data relating to purchases and sales to members have up to now not been published, but such business is known to be done to a limited extent only.

The co-operative credit societies in the territories occupied after the Balkan war. — Under Turkish rule no co-operative societies existed in these territories. The commission appointed to enquire into the form of co-operative credit society most adapted for those countries proposed, after lengthy study, to establish co-operative credit societies there of a mixed type, that is, combining in some way the characteristics of the Raiffeisen and of the Schulze-Delitsch societies, on the basis of the following rules :

(1) Limited liability of members (from 5 to 10 times the amount of the shares held by each) ;

(2) Obligation on the part of each member to hold at least one share (of 20 to 50 francs) with right of payment by instalments (1 fr. per month) ;

(3) Precise delimitation of the sphere of action (a village, a city, a commune) ;

(4) Distribution of profits: 20 % to the members in proportion to the share capital paid up; 30 % to the debtor members in proportion to the interest paid; 50 % to the reserve fund;

(5) Granting of loans for productive purposes exclusively, at short date (3 years maximum) and to allow of the purchase of late feudal estates; grant of long-date mortgage loans (10 to 30 years).

§ 2. Other descriptions of co-operative societies.

Societies of consumers. — The consumers' societies are of two kinds: (*a*) Those buying and distributing to their members goods for consumption; *b*) Those buying and hiring out to their members agricultural implements.

(*a*) The first co-operative society of the former class was created in 1903; there are now 42 of them, with 2480 members. All these societies are of the Rockdale type, the sale of the goods for consumption being limited to members exclusively. The latter are bound to pay for their shares, the amount of which is 12-25 francs each. In addition to this capital the societies have credits with the Central Co-operative Society of which they make extensive use. As a rule these societies only sell articles of primary necessity (such as salt, sugar, rice, petroleum, matches, etc. etc.) and for cash alone, at cost price.

Out of the net profits, 10 to 20 % is added to the reserve fund and the remainder distributed among the members in proportion to the purchases. The following table contains a few data as to the above co-operative societies:

Number of societies.	42
» of members.	2,480
Shares paid up.	48,254
Value of goods distributed to members	1,306,600 fr.
Reserve fund.	6,576 »
Amount of net profits.	5,800 »

(*b*) The societies of the second type, *i. e.* those purchasing and hiring out to their members agricultural implements, have for the most part been created on the initiative of the Central Cooperative Credit Society, which makes use of them in order to spread the use of machinery and up to date agricultural implements among the farmers. The societies of this type number 150 with a membership of about 7000. The latter are not required to pay for any share, but only for the hire of the implements. The rate of hire is fixed as so to allow for forming a redemption and reserve fund. These co-operative societies, being without any capital of their own, are bound

to contract debts, but exclusively towards the Central Co-operative Credit Society, which supplies them on credit with the machinery and implements, debiting them with the corresponding value. The Central Cooperative Credit Society grants cash loans only when it does not possess implements and machinery.

Societies of producers. — There are only two kinds of cooperative societies of producers: *a)* co-operative dairies, and *b)* co-operative wine makers.

(*a*) The co-operative dairies numbered 12 at the end of 1909 with 318 members. They are organised on the following principles: the number of members is rather limited; members are compelled to purchase at least one share of 25 to 30 francs; each member is bound to supply the co-operative society with the milk which he does not need personally for direct consumption or for the manufacture of butter and cheese for his own use. The society undertakes not only the production but also the sale of the products. The members receive a part of the value of the goods at the time of delivery to the society, and the rest is distributed to them at the close of the year. The capital necessary for starting, purchase of implements, etc., if it exceeds the capital paid up by the members, is taken on loan from the Central Co-operative Credit Society. The following table contains some particulars relating to the operation of the society dairies:

Number of co-operative societies	12	
» » members	318	
Paid up capital	9,396	fr.
Milk supplied by members	189,697	litres
Milk sold by societies	60,070	»
Cheese produced	36,090	kilogrammes
Butter	3,138	»
Amount of debt to Central co-operative credit society	16,800	francs.

A rudimentary form of joint dairy is frequently met with in the North East part of Serbia. The farmers of a village collect all their cattle into one herd and put it out to pasture together. Each member is entitled to collect for his own profit the milk of the entire herd for a period determined on the basis of the number of cattle belonging to him.

With regard to the co-operative wine-making societies, there are only three, one founded in 1907 and the other two shortly before the Balkan war; the latter have remained almost entirely inactive.

The co-operative wine-making society of Venciani, formed in 1907, numbers 26 members; they are bound to acquire at least one share of 200 francs, with the right of payment by instalments. The capital being insufficient to cover the starting expenses, the society was compelled to contract a loan from the Central Co-operative Credit Society at 4 %. The society undertakes the production of wine and its sale. The member when delivering the grape receives a payment on account and the balance is

paid to him after the sale. The position of this society at the end of 1908 was as follows :

Number of members	26
Paid up capital	9,933 fr.
Grapes delivered	240,000 kg.
Value of landed property	16,656 fr.
Value of implements	20,421 »
Debt to the Central Co-operative Credit Society	44,841 »

Mutual Aid Societies. — Societies of this kind are about 60 in number with 4000 members; the latter have to pay a monthly contribution ranging from 10 to 20 centimes, by which they ensure to themselves medical assistance and medicine in case of illness, and a small bounty to their families in case of death.

Cooperative labour societies. — Labour societies in the strict sense of the word do not exist in Serbia. There are indeed two forms of association of labour, one of which is becoming more and more restricted while the other approaches more and more to the pure type of cooperative labour society.

The first is known under the name of " Moba " and consists in the mutual assistance rendered to each other by peasants when harvesting corn and plums, at vintage time and when hay-making. In the districts where small estates are the rule (districts of Pirot and Topliza) there are co-operative rentings of land. In this connection we must note that until some time back the society was responsible for the payment of the rent, while the members afterwards divided the land among them and each worked his own portion for his account. Latterly however the land rented is worked jointly and the crop distributed in proportion to the work performed. In 1909 the collective rentings were 10, with 63 hands. We may note here that as small and medium farms prevail in Serbia, these associations do not find an environment very much adapted to their development.

§ 3. The central co-operative credit society.

Organisation. — During the first years of their existence the credit societies did not produce the expected advantages in Serbia, owing to the scarcity of capital. The farmer being indeed unable, according to local law, to procure money on bills of exchange, the credit societies could not hand over a holding of bills to the banks as security; it was therefore difficult and often impossible for them to procure the necessary capital. With the object of increasing the capital available for farmers' needs, it was decided in 1897 to create a Central Co-operative Credit Society which was actually formed in 1899. Two years before article 5 of the lottery law was modified,

and under this enactment 25 % of the net annual profits were, up to the amount of 2 million francs, assigned to the Central Co-operative Credit Society. The latter was inaugurated on the 16th December 1899. The Central Co-operative Credit Society is a co-operative society of the second degree, which was joined at first by the rural credit societies and afterwards by the societies of consumers and producers, etc.

Each adhering co-operative society is bound to hold at least one share of 100 fr. Payment by annual instalments of 20 francs is allowed. The number of the shares held varies according to the amount of the reserve fund and of course according to the demand for credit. On the basis of article 49 of the law on co-operative societies, a society cannot contract loans to an amount exceeding one thousand times the value of the shares held. The other provision contained in article 79 of the above law, by virtue of which each co-operative credit society is bound to invest one half of its reserve fund in shares of the Central Co-operative Credit Society, is to-day of no great importance, as the reserve fund up to now is of small amount. As against third party creditors of the Central Co-operative Society, the amount of the shares is considered as the capital of the society, thus forming a clear and safe guarantee. In the relations between the societies and the Central Society the amount of the shares is regarded as capital belonging to the members deposited as savings with the Central Co-operative Credit Society; the latter indeed allows interest at 3-4 %, but the deposits cannot be withdrawn unless a society ceases to form part of the Central Society.

Working Capital. — In addition to the shares, the Central Co-operative Credit Society has the following capital :

(*a*) Savings deposits : these are accepted both from members and non-members. The minimum amount is one franc. The maximum is fixed every year by the General Meeting. The interest allowed is 4 %.

(*b*) Reserve fund: Like the credit societies, the Central Co-operative Credit Society distributes no dividends to the members, and all the profits are put into the reserve fund (article 55). To the reserve fund likewise are appropriated all legacies, gifts etc., although they are entered separately. The reserve fund is the only capital which can in every respect be regarded as belonging to the Central Co-operative Credit Society. Therefore, when the Society is dissolved, the reserve fund is not divided among the members, but is deposited with the General Union of Co-operative Societies until another Central co-operative credit Society is formed (art. 55).

(*c*) Government subsidy: We have already stated that under the provisions of the law of 1879, 25 % of the net profits of the lottery are allocated to the Central Co-operative Credit Society. The fiscal law of 1900 enacted that there should be added to this sum every year the amount of 50,000 fr. up to a maximum of 2 million francs. Although this amount was reached by the payment in 1913, nevertheless the subsidy of 50,000 fr. was likewise allowed in the 1914 budget. As against third parties the subsidies are considered as capital belonging to the Central Cooperative Credit Society. From the legal point of view, however, they can only be regarded as loans

granted by the State to the latter society. The State could not demand repayment of the subsidies except in case of dissolution of the Central Co-operative Credit Society. The latter Society is furthermore able to procure other resources by contracting loans from credit institutions, which loans would be guaranteed both by the capital of the Central Co-operative Society itself, consisting as stated of the reserve fund and of the capital paid up by the members (shares), and the Government subsidy. The total amount of these capitals is about 2,300,000 francs. Article 13 of the law further provides that the co-operative societies which are affiliated to the Central Co-operative Society are liable for the obligations of the latter to an amount equal to 100 times the value of the shares held. The Central Co-operative Credit Society has, up to the present, however, not contracted any loan with credit institutions, because (apart from the fact that the rate of interest to be paid would not be less than 5 or 6 %) the Society does not feel any need for it, as it can employ the capital at its disposal by depositing it as savings with other banks : thus in 1913 the Central Co-operative Credit Society invested as savings 989,499 francs.

Grant of Loans. — The Central Co-operative Credit Society only grants loans to affiliated societies. In contrast however to those co-operative credit societies which grant loans for exclusively productive purposes, the Central Co-operative Credit Society also grants them for purposes of consumption and maintenance. The General Meeting fixes the amount of the credit to be allowed to each society according to the following general principles :

(1) No co-operative society can enjoy a credit exceeding ten times the value of the shares held.

(2) The limited liability co-operative societies cannot enjoy a credit exceeding ¼ of the value of the landed property of the members.

(3) The limited liability co-operative societies cannot enjoy a credit exceeding one-half of their capital.

The law does not fix the period of the loans a priori ; in practice they are granted for longer or shorter terms according to the operations of each member. The most usual term is two years. The Central Co-operative Credit Society is likewise authorised to demand repayment before maturity in the following cases :

(*a*) if the borrower uses the capital in a way different from that declared in the application,

(*b*) if the borrower suspends operations for a period exceeding two months,

(*c*) if the borrower ceases to form part of the Central Co-operative Credit Society,

(*d*) if the financial position of the individual members of the co-operative credit societies becomes precarious,

(*e*) if the savings deposits in the Central Co-operative Credit Society are withdrawn to a considerable extent.

The co-operative societies of producers (dairies and wine-makers) allow

the Central Co-operative Credit Society interest at 3 and 4 %, the others interest at 5 %.

In addition to granting loans, the Central Co-operative Credit Society purchases various goods and resells them to the affiliated societies, also undertaking the sale of the latter's products. The following table contains some particulars as to the operation of the Central Co-operative Credit Society :

Year	Number of members	Number of shares	Amount of shares	Reserve fund	Savings deposits with the C. C. C. S.	Amount of the reserve fund of dissolved societies deposited with the C. C. C. S.	Loans
1903.	263	522	40,554	4,228	513	2,884	199,179
1904.	315	622	52,333	5,201	237	4,481	306,350
1905.	413	941	70,353	6,412	685	5,287	462,824
1906.	484	1,111	85,163	7,766	6,793	9,115	475,358
1907.	548	1,275	105,916	10,155	15,513	10,571	540,203
1908.	572	1,408	127,825	11,946	9,084	13,416	629,805
1909.	608	1,549	150,829	15,137	20,095	13,509	547,673
1910.	643	1,744	174,751	14,482	20,785	13,403	946,952
1911.	651	2,072	196,277	36,132	33,706	16,379	902,731
1912.	668	2,600	231,423	62,155	41,014	17,782	1,296,908
1913.	?	—	246,712	312,842	38,325	18,866	1,352,109

From the 1st July 1912 to the 30th June 1913 :

Government subsidies	2,060,221 fr.
Cash	16,904.71 ,,
Deposits with other Institutions	989,499.30 ,,
Amount of sales to members	200,858 ,,
Amount of sale of members' products	1,540 ,,
Value of implements	77,427.75 ,,
Value of landed property.	71,138.15 ,,

§ 4. The General Union of Co-operative Societies.

Alongside the Central Co-operative Credit Society formed as a co-operative society in the second degree for financing the local societies, there also exists the so-called General Union of Co-operative Societies, created in order to safeguard the interests of members and farmers. All the local societies

and the Central Co-operative Credit Society itself must form part of the General Union. The objects proposed by the latter are the following :

(1) To keep observation over the working of the Central Co-operative Credit Society and the other societies ;

(2) To afford them aid and advice ;

(3) To safeguard the interest of the members in particular and of agriculture in general ;

(4) To promote the creation of new co-operative societies.

The General Union supervises the management of the co-operative societies, often sending its own inspectors to hold enquiries ; it published a fortnightly review (" Rural Cooperation ") and monographs on agricultural subjects. It has also organised " courses of instructions in co-operation ", and, in 1908, a co-operative school for the purpose of imparting to farmers the necessary elements of account keeping and the technical and administrative principles of co-operation.

The funds needed for the action of the General Union are made up by the compulsory payment by the members of a sum equal to 10 % of their net profits.

§ 5. Conclusion.

In order to appreciate at their just value the action and results obtained by co-operative societies in Serbia, it is necessary likewise to take into account the observations contained in the reports of the enquiries made on behalf of the Central Co-operative Credit Society and the General Union. From these reports it appears that :

The action of the rural co-operative societies has been exceedingly useful to the development of agriculture ; the co-operative credit societies have granted loans on fair conditions ; the consumers' societies have distributed to their members goods of excellent quality at relatively low prices, while their competition has likewise caused a reduction in the selling prices ; the societies of producers have created single standard types of goods.

The enquiries however also brought to light the fact that the creation of new co-operative societies still encounters great difficulties (especially through the scarcity of capital), and that the working of the credit societies is also hindered : 1) by the too short period for which the loans are granted ; 2) by the insufficiency of the maximum amount allowed for each loan. All the working capital of the co-operative credit societies does not exceed 4,573,786 fr., out of which 2,474,240 is formed by the compulsory savings deposits of the members and 2,099,546 by the working capital of the Central Co-operative Credit Society. From this total of 4,573,786 fr. however there must be deducted the sum granted on loan by the Central Co-operative Credit Society to the other co-operative societies, and that portion of the compulsory savings deposits which is effected with money lent by the co-operative societies to their own members. The remaining capital is not

sufficient to meet the needs of credit in a country where 83 % of the population consists of agriculturists, particularly as the total of the mortgage loans granted throughout the country by the " Uprava Fondava " (National Mortgage Bank) does not exceed 6 or 7 million francs. This state of things makes the enactment prohibiting co-operative credit societies from contracting loans elsewhere than from the Central Co-operative Credit Society appear somewhat questionable ; the principle which inspired these enactments was the idea of preventing the societies from paying excessive interest on loans secured by them ; the enactment however is not supplemented by the other exceedingly necessary one directing the agriculturist as to the source from which he may obtain the necessary means. Without this indeed, when the farmer is unable to obtain further loans from the Co-operative Credit Society, he will apply directly to some institution and will certainly be compelled to pay an interest higher than he would have had to pay if he had secured the loan from or through the society.

Without going into the question of the manner in which the co-operative credit societies might increase their working capital, we may note that the interest at 9-11 % (which would be that paid by the farmers on loans contracted with a credit institution through the agency of the co-operative societies) would not be insupportable if the sums obtained were rationally employed. A rational agricultural investment in Serbia may yield 15 % and sometimes 20 % net.

Furthermore the period of two years fixed by the co-operative credit societies is only sufficient for the purchase of seeds and the payment of wages, while for the purchase of cattle and for improvements the loans should be granted for longer periods.

The same must be said of the provision limiting to 500 fr. the maximum amount of the loans to be granted to the farmers ; this sum is too small. The creation of societies of producers is also hindered by the fact, in addition to the scarcity of capital, that the farmers live too far away from each other in the country, and also the fact that a single and standard type of the various products is wanting.

There are no co-operative insurance societies in Serbia, nor is it likely that they will speedily be formed on private initiative. The State should, at least at the outset, take the place of the private insurers.

MISCELLANEOUS INFORMATION RELATING TO CO-OPERATION AND ASSOCIATION IN VARIOUS COUNTRIES.

CANADA.

1. THE COOPERATIVE ASSOCIATIONS OF LIVESTOCK-BREEDERS IN THE WEST OF CANADA. — "The Agricultural Gazette of Canada", published by the Department of Agriculture of Canada, Issues for December 1914, February and December 1915 and April 1916.

Of late years there have been numerous endeavours to organise cooperative livestock-breeding associations in the West of Canada, and these efforts have been crowned with success.

The first step in this direction was taken at Lethbridge (Alberta) in the spring of 1904, and since then, cooperative societies having for their object the promoting of livestock-breeding and sales have been formed in various parts of the western provinces, especially at Calgary, and likewise in Alberta, at Canora and at Elfros in Saskatchewan.

At *Lethbridge*, on the initiative of the local *Board of Trade*, instead of forming a share company, it was thought more advisable to obtain the personal guarantee of sixty well-to-do inhabitants of the locality ; the guarantee of each of them is limited to $150, and the total guarantee to $9000. The guarantors have delegated to four directors the task of conducting the operations on their behalf. To form the working capital, the society adds 5 % on to the purchase price of the livestock which it afterwards re-sells to its members. It also benefits by the difference between the rate of interest on the promissory notes handed it by its members on delivery of the animals (8 %) and the interest required by the Bank where these instruments are discounted (7 %).

A few precise particulars can be given about the operation of this society. When making out his application for the purchase of stock, the farmer must furnish a statement of his business, and also good references. If the directors find the application justified, a loan of a maximum of $400 is granted him, and the society provides a lien, in favour of the guarantors, on the livestock purchased with the amount of the loan and the products from the said livestock. The promissory notes intended to ensure payment of the loan have maturities varying from six months to two years. The brand of the guarantors is branded on the livestock so supplied and the animals are periodically inspected by the directors.

At the end of 1915, 22 loans had been granted by the society, 2 of which had already been fully repaid ; the livestock bought comprised 78 head of cattle and 9 pigs. The total of loans effected amounted to $6,342.21 of which $1,834.66 had been repaid

The *Calgary Association* which was formed by the citizens of that town has succeeded in arousing the utmost interest in the farmers of the neighbourhood. Its object is to facilitate the development of breeding and of the dairy industry in Alberta ; to this end it assists farmers in buying livestock either by allowing them credit direct, or by guaranteeing the credit secured by them in some other way. Furthermore, it engages in the purchase and sale of animals alive or dead, and also their products.

The capital of the society amounts to $25,000 in 250 shares of $100.

The *Co-operative Association of Stock-Breeders of Elfros* has an authorised capital of $40,000 divided into 400 shares of $100. Its object is to encourage mixed cultivation throughout the territory where it can make its action felt : (*a*) by purchasing livestock in large or small quantities and re-selling same to its members at a reasonable profit not exceeding 5% of the actual price of the animals, this profit benefiting the funds of the society ; (*b*) by selling or assisting in the sale of the animals of its shareholders. The method adopted by the association in its operations is as follows. If a shareholder wishes to buy one or more head of livestock, he makes application to the society, furnishing the necessary details and specifying in particular the price he is prepared to pay. The association procures the animals demanded, paying for same by means of an advance of funds granted by a bank (Canadian Bank of Commerce) giving as security to the latter a sufficient part of the still unpaid share capital to cover the sum borrowed. The members on their part hand the society, on delivery of the stock, a promissory note to the order of the Bank ; this note is endorsed in guarantee by the society, which as security takes a lien in its favour on the animals sold. Thanks to this method of procedure, the association can grant a credit of 1, 2 and even 3 years to the farmers for payment for the stock it obtains for them. In this way the farmer can, with the profit he makes on the animal or animals bought, pay their purchase price without resorting to additional burdensome loans to pay off the amount.

At the end of 1915, the subscribed capital amounted to $11,000 and the number of members to 58. From its entry on operations (1914) to the 31st December 1915 the society bought 4 bulls, 23 calves, 52 steers, 15 cows and 94 mares, being 188 head of stock. These figures however do not reproduce the actual demand, which was much more considerable (being one hundred animals higher in the spring of 1915). The high market prices however and the insufficient supply of forage brought down the operations to the above named figures.

On the 1st January 1915 the debt outstanding from the association of stock-breeders of Elfros to the bank supplying it with funds amounted

to $5,883. The total of advances made by that bank from the outset was at the same date $7,927 of which $2,044 had been repaid on maturity.

The natural increase in livestock sold to its members by the association having been 56 heads, it follows that the numerical strength of the herds possessed by the farmers in this districts rose by 244 head. Such is the direct result of the activity of the society. Indirectly, however, the example given has prompted other farmers to concern themselves more with stock-breeding and thus to derive a better profit from their farms. Nevertheless, in order that the assciation may give all the results it is capable of furnishing, it will have to find a means to obtain long-date loans direct, its resources at present being too limited.

The *Canora Cattle-breeders' Society* was also founded in the spring of 1914 with a capital of $25,000 in shares of $100, the major part of which were subscribed by the farmers who, thanks to that society, were able to obtain stock of pure breed at the best price. As soon as the demands of members allow of a consignment of a complete truck, the agents of the Association buy the required animals. On delivery, the Canadian Bank of Commerce advances the money direct to the buyers against a promissory note endorsed by the association, which covers itself in turn by a lien on the stock. Twenty sows were sold in this way in the first year, and in the following year the natural increase in the number of these animals amounted to more than 300 head.

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2. THE DAIRY INDUSTRY IN SASKATCHEWAN IN 1915.—"The Public Service Monthly" published by the Department of Agriculture with the authorisation of the Government of Saskatchewan. Vol. IV, No. 9. Regina, April 1916.

The Dairy Industry Section of the Provincial Department of Agriculture has drawn up interesting statistics on the production of butter in Saskatchewan in 1915. According to these figures, 23 establishments supplied to the markets more than a million dollars' worth of butter and other dairy products. The quantity of butter manufactured rose indeed to 3,831,000 pounds, representing a value of $1,059,443. To this sum must be added the value of the milk, cream, frozen cream and whey totalling $379,153.

These particulars do not indeed correspond to the total production of the dairy industry of this province: they suffice nevertheless to give a fairly accurate idea of the economic importance of this industry.

Of the 23 establishments mentioned above, 15 are cooperative societies, and consequently are placed under the direct supervision of the State. The system of these cooperative dairies, the number of which steadily increases, though confined to meeting the increased demand for dairy products, has undergone some modifications by reason of this development, and an ever greater tendency is found to centralise production in large establish

ments, in order to diminish the costs of working and obtain butter of a standard quality, thereby greatly facilitating the sale. For the rest, a similar process is recorded in the province of Quebec, where the Government inspectors are endeavouring to reduce the number of small butter and cheese dairies by combining them in groups of two or three.

The butter of the Government dairies of Saskatchewan has found a particularly advantageous market in British Columbia, where it has supplanted to a great extent the New Zealand butter. The demand has even been much greater than the supply, and it is estimated that if the production had been doubled it would have found purchasers in this province. The home consumption of Saskatchewan has also considerably increased; therefore the sale in other provinces has necessarily been limited to some extent.

We may add that, owing to the development undergone by the dairy industry, not only has there been a great increase in cattle numerically, but the quality of the animals has also largely improved, thanks to the importation of milch cows of good breed.

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3. COOPERATION IN THE PROVINCE OF QUEBEC. — Report of the Minister of Agriculture of the Province of Quebec, 1915. Printing office E. E. Cinq-Mars, Quebec, 1916.

During the year 1915, 35 new co-operative societies were organised in the province of Quebec.

Therefore in that province, at the 31st December 1915, there were 148 co-operative societies, that is to say one to each 13,545 inhabitants, while Switzerland and Denmark, the most advanced countries in the matter of co-operation, counted one co-operative society per 500 and 600 inhabitants respectively, and England one per 1100 inhabitants.

Nevertheless, the movement of co-operative organisation is making rapid progress in Canada, and one is justified in thinking that the excellent results obtained by the majority of the societies already formed will render the multiplication of co-operative societies more rapid still in the future.

Among the most prosperous, mention should be made of the co-operative agricultural Society of cheesemakers of Quebec, and the co-operative agricultural society of the valley of Yamaska. The former, the work of which we shall examine in detail in a special article, was founded in April 1910, the latter in May 1911. The last-named has its principal centre at St. Césaire, in the county of Rouville, and operates in the region of which it bears the name. It numbers 350 members, for the most part tobacco planters. Its subscribed capital is $37,000 of which $36,400 have been paid up. Its turnover amounted at the 31st December 1914 to $104,000, and during the last three years it realised a total net profit of $44,395.14 which enabled it to pay to its members an annual dividend of 6 %, while forming a reserve fund of $61,195.59.

At Princeville, county of Athabasca and Mont Laurier, county of Labelle, the bases were recently laid of a few societies which will deal specially with the trade in smoked meat. In the former locality a capital of more than $30,000 was subscribed within a very short time, and a modern abattoir was built which began operations at the commencement of 1916. At Mont Laurier, $17,150 were subscribed by 224 shareholders and it is likewise proposed to build a cooperative abattoir.

UNITED STATES.

AN ASSOCIATION OF PLUM AND APRICOT GROWERS IN CALIFORNIA. — "*California Fruit News*," Vol. 53, No, 1449 and 1450, San Francisco, April 15 and April 22, 1916.

Taking example by raisin and peach growers, the plum and apricot growers in California have realised the necessity of combining in order to ensure disposal of their fruit at a sufficiently paying price.

On the proposal of the director of markets in that State, Californian plum and apricot growers foregathered on the 14th April last. The meeting decided to organise an association with the assistance of the Growers' Enquiry Office at San José, and with the encouragement of the director of markets, who secured the approval of the meeting for the bases of working and the programme of the society. The proposed organisation is similar to the California Associated Raisin Company (1) and the California Peach Growers' Association, also in process of formation. The following are the principal features:

The capital of the association to be $ 2,500,000. The amount of share capital to be subscribed by each grower will be proportional to the number of acres cultivated by him under plums and apricots. Out of the above sum $ 750.000 must be paid up in cash at the 1st March 1917, and the lands of the subscribers must represent at least 75 % of the area under the like cultivation in California. The members undertake to deliver their crop to the Association for 3 years (1917, 1918 and 1919). To provide for the possibility of the subscriptions coming in very fast, so that operations could be begun this year, the Association will, up to the 1st August, have a preferential right to the 1916 crop.

The territory of the State will be divided into 7 districts ; 6 of them will appoint 2 representatives each, and the other (which is the Santa Clara valley) will appoint 12. Another representative will be appointed by the director of markets, with the approval of the governor. These 25 delegates, who will remain in office for seven years, form the directing board.

(1) See International Review of Agricultural Economics, Nos. 1 and 4, January and April 1915.

The capital subscribed may be paid as to 50 % in cash and the balance by note of hand. The purchase contracts ensure the grower getting a minimum price both for plums and apricots. When the crop is delivered the Association will pay over to the vendor a part of the amount due to him. The difference between the actual selling price less ¼ % managing expenses, and the minimum price, will be paid over to the members at the end of the financial year.

If a grower does not deliver his fruits to the Association agreeably to his undertaking, he will have to pay the latter an indemnity of 2 cents per pound of fruit thus sold.

The share capital paid up shall carry interest, and will be utilised as far as possible for making advances to the growers in order to promote cultivation work and harvesting.

Finally, the Association reserves the right to cancel contracts of purchase in case of alteration of the United States customs tariff for plums and apricots, if such alteration makes it impossible for the Society to continue guaranteeing the established minimum price to growers.

The spirit of association is evidently making remarkable progress in California, as other organisations, such as the California Cured Fruit Exchange, the Farmers' Union and the Associated Raisin Company have placed part of their plant and their packing and selling department at the disposal of the newly organised Society.

The association of Plum and Apricot Growers is under government control. The representative of the State on the board of directors will fulfil a function similar to that of the Government inspector in State Banks ; he will have to supply the director of markets with a copy of the minutes of the board meetings, and bring under his notice any deficiencies in the operation of the society. If the facts brought to his notice seem to him serious the director of markets has power to open an enquiry, and publish the result if necessary in order to enlighten the shareholders on the conduct of the business of their Association.

FRANCE.

THE CENTRAL ASSOCIATION OF COOPERATIVE DAIRIES OF CHARENTE AND POITOU IN 1915. — *L'Industrie du beurre*, issue of the 30 April 1916.

The output of dairy products of the associaton was as follows in 1915 : The number of cows was 192,966, the quantity of milk 285,535,288 litres and the butter produced 12,903,630 kilograms. Compared with the figures for 1913, there is observable a diminution of 7.3 % as to the cows, 14.1 % in the milk and 16.7 in the butter. The yield went up from 21.26 to an average of 22.12. With regard to the net price per kilogram of butter, it rose from 2 fr. 97 to 3 fr. 66. The total receipts, reckoning 2 fr. 50 per hectolitre

for the skim milk, make the figure of 53,092,931 fr. 31. The yield per cow was 1,479 litres of milk and 67 kilograms of butter.

The general expenses, as compared with the total receipts show the proportion of 12 % and 2 fr. 23 per hectolitre, whilst in 1913 they represented 11.2 % of the receipts and 1 fr. 71 per hectolitre of milk. This therefore is an increase of 0 fr. 52 per hectolitre. On butter, the rise per kilogram was 0 fr. 69, corresponding to more than 3 centimes per litre of milk, as the average of the year.

SWITZERLAND.

SWISS CENTRAL FEDERATION OF MILK PRODUCERS. — Schweizerisches Zentralblatt für Milchwirtschaft, Brugg, 23 December 1915, No. 51.

The Swiss Central Federation of Milk Producers (*Zentralverband schweizerischer Milchproduzenten*) is made up for the working year 1915-1916 of the following organisations:

A. *German Switzerland :*

1) Federation of co-operative dairies and cheese-makers of Berne (*Verband bernischer Käserei- und Milchgenossenschaften*).

2) Federation of co-operative dairies and cheese-makers of North Eastern Switzerland (*Verband nordostschweiz. Käserei- und Milchgenossenschaften*).

3) Federation of co-operative dairies and cheese-makers of North Western Switzerland (*Verband nordwestschweiz. Käserei- und Milchgenossenschaften*).

4) Federation of co-operative dairies and cheese-makers of Aargau (*Verband aargauischer Käserei- und Milchgenossenschaften*).

5) Federation of co-operative dairies and cheese-makers of Thurgau (*Verband thurgauischer Käserei- und Milchgenossenschaften*).

6) Federation of co-operative milk products societies of Central Switzerland (*Verband zentralschweiz. Milchverwertungsgenossenschaften*).

7) Federation of co-operative dairies of Zug, Aargau and Lucerne (*Verband zugerischer, aargauischer und luzernischer Milchgenossenschaften*).

8) Federation of co-operative cheese-makers of St. Gall (*Verband St. Gallen-Käsereigenossenschaften*).

9) Federation of milk-producers of Glarne (*Verband glarnevischer Milchproduzenten*).

10) Federation of milk-producers of St. Gall-Appenzell (*Milchproduzentenverband St. Gallen-Appenzell*).

11) Federation of milk-producers of Rorschach and environs (*Milchproduzentenverband Rorschach und Umgebung*).

B. *Romance Switzerland :*

12) Federation of co-operative dairies of Vaud and Fribourg (*Fédération laitière Vaudoise-Fribourgeoise*).

13) Federation of co-operative dairies of Vaud and Geneva (*Fédération Laitière Vaudoise-Genevoise*).

14) Federation of co-operative dairies of Fribourg, zone of "Montagne Bulle" (*Fédération des sociétés Fribourgeoises de Laiterie, zone de la Montagne Bulle*).

15) Association of combined co-operative dairies of Geneva (*Fédération des Laiteries Genevoises-réunies*).

As appears from this list, each region of Switzerland engaging in the milk industry has its federal organisation, which in turn combine in the central Federation.

Part II: Insurance and Thrift

GENERAL.

INSURANCE CONDITIONS IN REFERENCE TO THE TRANSPORT OF CEREALS

By Dr G. Rocca.

§ 1. General data.

The war has brought out clearly the economic importance of insurance for transport risk, both terrestrial and marine ; indeed the requisition of many means of transport by the military authorities, the stoppage or suspension of commercial railway traffic in some parts, the use by the armies or navies of the belligerent States of instruments of offence which are prejudicial to the safety even of the principal routes of national and international communication, are as many factors increasing the risk of transport and contributing therefore to a development of corresponding insurance.

The improvement of shipbuilding, just as the improvement of railway engineering, had considerably reduced the risks of transport in past times, but the war has had the result that many of the best steamers have been taken out of private hands, and that many safeguarding measures, such for instance, as the lighting up of the coasts, ships etc., can no longer be employed, and therefore from this point of view likewise, transport is rendered slower, more difficult and more risky.

Without insurance, modern mercantile vessels, with a carrying capacity of tens of thousands of tons, representing hundreds of thousands of pounds of capital, would not have been built, and if all importers and merchants had, at the present time, not been able to insure their goods against marine

risks and special war risks, the problem of the supply of raw material would have been a thousand times more difficult and caused a thousand times more anxiety than is now the case, especially for those countries which have to draw part of their needs from distant lands, such as America, Australia, etc.

It is well known that insurance conditions vary greatly according to the nature of the means of transport, the character of the goods, the voyage or journey and its duration, the time when it is carried out, etc. In the following pages, however, we shall deal only with those conditions of goods insurance which apply specially to the transport of cereals.

The present war has clearly proved the economic interdependence of the different countries, with respect to the grain supply in particular ; there are countries, such as Switzerland, in which two thirds of the requirements of cereals are imported from abroad, and notoriously the majority of the other countries of Europe are dependent on foreign markets for a proportion of their needs in regard to grain.

The insurance of cereal transport has therefore, under the circumstances now existing, assumed quite a special importance ; for Italy likewise the number of steamers loaded with cereals coming from La Plata and New York was never so considerable as in this period of war, and for that matter, it is sufficient to remember that in the store-houses of the port of Genoa alone there were, at the end of January last, 223,000 tons of cereals, in order to form an idea of the extent of the risk. From the very outset of the war the transport of cereals was the subject of particular care on the part of the Governments, as it was a question of the supply of an essential article of food.

Just as in every other branch of insurance, the policy conditions for the transport risk may be divided into three groups, according as they relate to the selection of the risk, the calculation of the premiums and the assessment of the damage (1). We shall here too, therefore, adopt this three-fold distinction, discussing first marine insurance, and afterwards land insurance.

§ 2. Marine insurance.

The policy conditions for marine insurance are much older than those for land insurance ; some of the provisions therein contained date back to the 15th or 14th century ; whilst insurance for land transport sprang up during the last few decades. For the rest, the transport of cereals, for instance, from Russia to Europe has always been of considerable economic importance.

(1) Some policies were kindly submitted to us by the "Italia" Marine Insurance Company in Genoa, and "The Marine Insurance Company" in London.

a) *Selection of the risks.* — Generally, the insurance companies take over the risks of damage and loss occasioned to the thing insured by storm, lightning, tidal wave, shipwreck, collision with ships or other stationary or floating bodies, including ice-bergs, grounding, forced abandonment, forced change of route, voyage or ship, jettison, fire, explosion, sacking and plundering, piracy, barratry and any other marine event which is not specifically excluded by the conditions of the policy.

Among the risks normally excluded are the risks of war, i. e. the damage and losses due to war, civil or foreign, hostilities, reprisals, embargoes, prohibitions of trade, blockade, capture, confiscation, any molestation by friendly or enemy governments, recognised or not recognised, violation of the law on transport of goods, contraband etc. These risks are at present only undertaken on special conditions and against payment of extra premiums.

As a rule, the companies are likewise not answerable for damages or losses due to any fault or act attributable to the insured, or to third persons (shipper, freighter, consignee, principal, commission agent or other agent, clerk or employee) whether or not they are the insured. Excluded from insurance is likewise the risk of barratry by the captain and the crew, when invested with the character of fraud and done with the connivance of the insured.

In like manner, the companies do not guarantee the damage and loss resulting from theft, miscarriage, inherent defect or from the special nature of the goods, from insects or any other animals (unless produced by immersion sustained during the voyage) from the influence of temperature, from dispersion, fermentation or shrinkage, natural or due to bad packing, or from the deterioration of the goods owing to prolonged sojourn in the hold of the ship by reason of any event or cause, apart from the cases where goods are insured free of particular average which we shall set out below. The insurance is likewise free of damage by rain, save for some exceptions indicated below, and also of risks of quarantine, demurrage, getting caught in ice, and wintering, even though the corresponding expenses may have been incurred for unloading, loading and storage of the goods.

The insured is bound to declare to the company, at the time of making the insurance proposal, all the circumstances likely to influence the estimation of the risk : the name of the vessel, and the captain, indication of place of departure and destination, the number of bags, the weight, the nature of the cereals, and the amount to be insured. If the insured cannot at once supply the exact and complete particulars, he must hasten to transmit them to the company as soon as they come to his knowledge, so as to replace the provisional and approximate declarations made at the time of the proposal.

Sometimes the insurance includes the freight of the goods, the expenses during the voyage, and the profits accruing from arrival of the goods at the place of destination.

The insurance proposals must be handed in separately; in the present period of war, in which the risks of transport have increased considerably,

it may be taken that almost all the risks of transport of cereals, especially for long trans-oceanic voyages, have been several times reinsured with different companies.

Any person insuring simply by order, without being the forwarder or consignee of the goods, or without having any interest therein, must declare this ; also in the case when the goods cannot be carried direct from land on board the ship, but must be transhipped from barges, this must likewise be stated in the proposal.

When the contract is concluded by a person acting as agent for the insured, the circumstances influencing the risk known to such agent must be made known to the insuring company ; likewise when the insurance is contracted for account of others, there must be communicated to the company all the circumstances known to the insured or his intermediary. Any concealment, or any incorrect or fraudulent declaration entails the voidance of the insurance, the premium paid being forfeited to the company,

With regard to the *duration of the insurance* the policies as a rule provide that the risk to the company takes its inception at the moment when the goods insured leave the land to be conveyed on to the ship for which they are intended, and terminates at the moment when the goods are unloaded on land at the port of destination.

The unloading of the insured goods at the place of destination from on board the ship must however, according to the policy of the committee of insurers of Genoa, take place within thirty days from the arrival of the said ship, on the expiry of which term, each and every risk to the company ceases, unless the delay in unloading is justified by quarantine or a case of *force majeure*. Other policies, on the other hand, declare in more general terms that if unloading is delayed unnecessarily, the insurance ceases from the moment when unloading should have been normally effected.

All risks of lighterage and boats required for transport of the goods from land to the ship and vice-versa in the places of unloading, are included in the insurance, and each lighter or boat is, in case of accident, regarded as a separate insurance ; some policies, however, specify that the said transport must be accomplished in cases both of unloading and loading of the goods within a certain time and not later (for instance five or ten days), after which, the insuring company is no longer answerable for the goods which remain lying in the lighters or boats.

It is difficult to convey cereals in steamers carrying passengers ; in any case it must be noted that as a rule, in the event of quarantine, the risks remain for account of the company ; should the vessel however go and pass the period of quarantine in a port other than the port of destination, the premium is increased ½ per cent for each month or fraction of a month, to be reckoned as a rule from the date of departure of the ship for the place of quarantine until its arrival at the place of destination of the insured voyage.

Finally, the selection of the risks likewise takes into account the *insurance value*. The policy conditions, with a view to avoiding every inducement to fraud and every illicit profit on the part of the insured, pro-

vide that the sum insured must exactly correspond to the value of the goods exposed to the risk. The insurance may therefore cover either the total actual value of the goods or the part value only, but not an amount in excess of the real value ; in this last case the insurance would have the effect, in the event of loss, of causing undue enrichment of the insured, while the insurance should instead have the sole object of making good losses sustained.

In the case, very rare in practice, of the trader insuring only part of the goods, the company is only answerable for the proportion of the insured sum which such sum bears to the total value of the said goods, that is to say, the insurance is subject to average ; for a part of the risk the insured remains his own insurer, and it is therefore just that a part of the loss should also fall upon him.

In any case, the sum insured represents the maximum limit of the liability of the company, and on the other hand, by insurance value or total value of the goods insured, there is meant the value of the said goods at the place and time of loading plus all the expenses until delivered on board, including the insurance premium, and, according to some companies, including likewise the freight and a proportion (about 10 % of the insured value) as anticipated profit.

In case of loss, the company may demand the production of the original invoices in proof of the value of the goods insured ; the premium for the amount insured over and above the value is in any case however forfeited to the company.

Finally we point out that the risks on cereals are as a rule guaranteed by what is known as an " open cover ". To guarantee each single risk of loss separately by means of as many insurance contracts would entail excessive expense and loss of time ; therefore, in the open cover, the company lays down beforehand in the contract the general conditions of insurance, the kind of goods insured, the means of transport, voyage etc. ; only the sum insured and the amount of the premiums are subsequently fixed on the basis of the individual shipments. The insured is therefore bound to keep a special " insurance day-book ", in which there are entered, day by day, in regular rotation, all the shipments, of which notice is given one by one to the connpany within a very short space of time (usually 24 hours). When making the notification, he must state the sum for which he proposes insurance, which however must not exceed a given limit fixed in the contract.

The very short term for the notice of declaring-on under the cover is explained by the fact that otherwise the insured could, in short voyages for instance, wait for some days in order to see whether the goods duly arrived and then not declare the shipment on, thus defrauding the company of the premium which it is in reality entitled to, having run the risk.

According to another system, of insurance in bulk, the contract fixes beforehand the sum insured and the premiums due.

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b) *Calculation of the premium.* — The insurance premium must be paid in cash on delivery of the policy at the domicile of the company or its branch or agency issuing the policy. The insured is bound, in addition to the premium, to pay the policy fees and stamp duty if any.

We have already pointed out that the factors determining the amount of the premium are manifold; it is of course taken into account whether the goods are loaded on a steamship or a sailing-vessel, and whether it is a coasting or ocean-going steamer; also the voyage to which the transport relates, its duration, and the facility or otherwise with which unloading can be effected in the place of destination, the season when the voyage is undertaken, the sum insured, etc. In transport insurance, in addition to the topographical risk due to the voyage which the cargo is to carry out, there is a specific risk due to the nature of the object insured.

Generally, allowance is made for the greater or lesser adaptability of the goods for withstanding a long transport without deterioration, the packing (but this factor is not of great importance in our case, because grain is often loaded in bulk), and finally, the method in which the goods are loaded, that is to say, whether loaded in the hold instead of on deck, or whether separated carefully from other goods, for instance liquids, which if loaded close to them, might easily cause damage.

In the insurance of transport, just as in insurance against damage by hail and mortality of cattle, a clause is widely adopted by which the insurer is not liable for damage below a certain percentage of the value insured (varying for cereals from 3 to 5 or even 10 % according to the nature of the cereal and the method of transport : steamer or sailing ship). On this method the company is relieved from the obligation to make good small damage which may easily occur during lengthy transport, and the assessment of which would entail considerable expenses out of proportion to their amount.

Generally, the percentage which the damage must amount to before the company is liable is greater the more likely the goods are to be damaged; in any case it will readily be understood that this likewise influences the determination of the rate; the higher the percentage free from claim, the lower is the premium; the insurer indeed takes into account the likelihood that the damage may not exceed such percentage and therefore no compensation will be due.

For the transport of cereals there are no special tariffs of rates; particularly in the present period it may be said that rates vary day by day according to the events of the war, the voyage in question, and the nature of the product. For instance, for transport from Argentina or the United States, the premium for the insurance of cereals varies, during the present months, from 30 centimes to 40 centimes, if the insurance is free of "particular average", that is to say if the company is free from all liability for particular average (save in more serious cases of collision, grounding, fire

and submersion) ; from 50 to 60 centimes including such average. These premiums are for the best steamships, but for sailing vessels and the older ships the said premiums may increase greatly, going up to 4 and 5 %.

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c) *Assessment of damage.* -- In any case of damage or loss the insured is bound, on pain of forfeiture of his rights under the contract, to communicate to the company, as soon as they reach his knowledge, all the advices or information having reference to the accident. In addition, the insured or consignee of the insured goods, or person acting on their behalf, must within a very short space of time (usually three days) call for the intervention of the average adjuster appointed by the company for assessment of the damage or loss.

The insured is bound, in case of accident, to take steps for the preservation, recovery or sale of the insured goods, endeavouring to reduce the loss and consulting the company for that purpose ; by payment of the indemnity, the company is substituted in the rights of the insured in relation to third parties and other insurers if any.

Some cereals are usually insured " free of particular average ", and here a distinction must be made between general average and particular average. Average is the term applied to all the losses or extraordinary expenses falling upon the ship or cargo together or separately.

The average is particular if due to exceptional causes and supported only by the owner of the thing damaged or which gave rise to the expense ; therefore it relates to the cargo alone (or to the ship alone, or to the freight) : for instance, a particular average is the loss occasioned to the goods by the infiltration of water. On the other hand average is said to be general when it is supported jointly by all those concerned, because it is a question of extraordinary expenses or losses sustained for the common salvation of the ship and the cargo (as for instance the jettison of some goods made by the captain for the purpose of lightening the vessel, etc.). In this latter case of general average, therefore, all the parties interested must cooperate in making good the loss, that is to say, the owner of the ship, the owners of the goods, and the captain as regards the freight.

Among cereals, maize, being more liable to spoil, is always insured free of particular average ; in this case the company is not answerable for the loss, even if it exceeds three-fourths of the value of the goods, unless it is a question, as already pointed out, of grounding, collision, fire or submersion. As a rule, the material damage sustained by the insured goods in the operations of transhipment are made good over a free margin of 3 or 5 %. In case of the goods being loaded on deck, the company is not liable otherwise than in the event of total loss of the ship, and free of both general and particular average.

In the case of grounding, collision, fire and submersion, the company makes good entirely, by weight and quantity, the losses resulting from the said events, and in order to ascertain the losses in weight and quantity the natural shrinkage as found by practice is deducted. There is grounding in the above sense when the ship, under unusual circumstances of navigation, remains stranded and cannot be refloated, or is refloated by lighterage or by extraordinary means of assistance. When on the other hand the vessel collides with another ship or a fixed or floating body, the case of collision occurs.

As a rule, when the cereals are insured "including particular average", a free margin of 3 % is allowed separately for each hold and complete compensation for the damage is given, when such damage rises above the free limit. In case of cargoes on steamships, the free limit for cereals not specially mentioned, for grain in bulk, is, as we have stated, 3 % ; when it is a question of grain in sacks, it is 5 % ; for flour, as also for rice in sacks, it is 10 % ; rice in bulk is always insured, like maize, free of particular average.

When the goods are loaded on sailing vessels, owing to the greater risk, they are always understood as insured free of particular average; for grain however in bulk and in sacks (excluding maize) it is usual, even in case of loading on sailing vessels, to fix a free limit of 10 % to be reckoned on the sum insured.

While in other agricultural insurances and insurance against losses the expenses of salvage sustained in order to prevent or reduce the loss (in so far as the insured thinks desirable) are payable by the insurer, even should their amount, added to that of the actual loss, exceed the total of insurance ; in transport insurance, on the other hand, the liability of the company is always limited to this latter sum. The rule is justified in consideration of the facilities for the insured otherwise to increase these expenses beyond measure. Subject to this, the expenses of unloading, reloading, warehousing, extra freight etc., and in general all extraordinary expenses made for the preservation and custody of the cargo, or for the purpose of obviating or reducing the loss, are repaid without any deduction for "free" percentage in proportion to the sum insured.

Particular average is as a rule ascertained by expert survey proving the value of the goods in sound condition and the price obtainable in the damaged condition ; if on the other hand the goods are sold by public auction, the survey is confined to ascertaining the price when sound. The difference found between the estimated price of the goods insured when sound and that in the damaged condition or obtained from the sale, without deducting the expenses, serves as the basis for the repayment of the damage.

In view however of the seriousness of marine risks, with the system of insurance free of a certain percentage, the insured might have to bear considerable losses for his own account ; for instance, if the entire cargo of flour is insured for £5,000 and the insurance is free of 10 %, all the cases of average entailing a loss below £500 would be for account of the insured.

In order to obviate this drawback, it is the practice to divide the insured goods into so many lots, so that the free percentage is reckoned,

not on the entire sum insured, but on the several lots which have sustained average. Therefore there are, as it were, so many distinct insurances, one independent of the other ; each lot must represent a certain value fixed in the policy, for instance £100 if the goods are enumerated as in so many lots, and £200 if not enumerated. Or else the policy provides that the goods must be divided into lots of at least 10 cases, 100 barrels, etc. For instance, among cereals, rice is as a rule divided into lots, and some English policies distinguish the division into lots according to the origin of the rice, providing that for rice from North America each lot shall consist of 15 barrels, for imports from the East Indies each lot shall consist of 2000 sacks, and finally for imports from Batavia, 1000 sacks.

It is clear that this system of division into lots cannot be applied to goods laden in bulk.

Finally, to the party insured against risks of transport there appertains not only the right, under the claim for average, of demanding compensation for the damage actually sustained, but he also has the right to claim the whole sum insured, provided he abandons to the company all the goods salvaged or capable of being salvaged from the accident. By this right of abandonment there are eliminated many difficulties inherent in the survey and ascertainment of the losses, and in order that the position of both parties should be defined within the briefest space of time, the right of abandonment must be exercised within a definite date on pain of lapse. The property in the things abandoned passes to the company.

Policies of insurance of goods however limit the right of abandonment to a few cases, namely :

a) in case of absence of news of the whereabouts of the ship on which the goods insured were loaded ; and the policies specify the various cases in which a ship must be considered as lost, according to the duration and the risks of the voyage which the said ship was to accomplish ;

b) when, as the result of damage covered by the policy, it has not been possible to find a ship to reload the goods and convey them to their place of destination, within three months for perishable goods and within six months for non-perishable goods ;

c) when the sale of the goods insured is ordered in a place other than that of destination, owing to average due to shipwreck, grounding, collision or fire ;

d) when the average of the goods insured absorbs three-fourths of the value in a sound condition at the place of unloading of the goods.

§ 3. Insurance for transport by railway.

Dealing here only with the provisions particular to transport by railway, some policy conditions relating to the selection of risks and estimation of losses deserve to be mentioned.

Generally, the companies are answerable for the risks occurring through exceptional cases, such as fire, explosion, lightning, earthquake, flood, col

lision, miscarriage and theft ; embezzlements and faults on the part of the railway employees, in so far as these acts injure the goods insured.

With respect to transport accomplished in Europe, the companies are accustomed also to guarantee the risks for goods loaded on open trucks, but only when relating to transport in countries the Governments of which have adhered to the international Convention of 1890 for the transport of goods by railway (Belgium, Germany, France, Italy, Luxemburg, Holland, Austria-Hungary, including Bosnia, Herzegovina and Lichtenstein, Rumania, Russia, Sweden, Switzerland and the other states which subsequently adhered thereto). It is however necessary that the said open trucks shall be fitted on both sides with walls at least 30 centimetres high, and that the goods shall be carefully covered with one, or if necessary several waterproof covers (tarpaulins) bound by cord and sealed.

The expenses of salvage and the extraordinary expenses of unloading, warehousing and reloading, which are carried out of necessity or usefully for the purpose of reducing or obviating loss or damage, and which in the transport of cereals are so frequently necessary, are made good by the company.

The companies are however not answerable for losses resulting from contraband, from false declarations, from the particular nature of the goods, parasitic insects, atmospheric influence, insufficient packing, etc For goods which, by their nature, are liable naturally to underge shrinkage during transport, the liability of the insurance companies with regard to the weight of the goods corresponds to that of the railway company.

The risks of theft or loss for transport in countries the Governments of which have not adhered to the above-mentioned international Convention, and also for transport beyond the European continent in the countries adhering to the above Convention, are excluded from the insurance.

The insurance begins from the moment of due delivery of the goods or likewise from the moment when the goods are loaded on rail, and terminates at the moment when the goods are delivered to the consignee at the station of destination, by the railway administration in question. Warehousing at the stations of departure and arrival is generally included in the insurance for the period of eight days. Should the consignee refuse to take delivery of the goods, or not take delivery of them in good time, or if delivery cannot be made for any other reason, warehousing is included in the insurance for a period of fifteen days.

Finally, the insurance also covers the risks relating to the crossing of rivers and lakes on the railway line, the normal period of stoppage in the custom house station, and also transport by carts from one station to another.

By the insurance value is meant the value of the goods at the place and at the time of forwarding, plus all the necessary expenses until their delivery to the railway, at the station of forwarding. By virtue of special clauses, the insurance also includes the freight, customs duty, expenses during transport and at the place of destination, and also the anticipated profit from the transport.

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With regard to the *estimation of the damage* it must be noted that if the goods have been sold during the journey in consequence of an accident, the loss is ascertained by calculating the difference between the net product of the goods after deducting freight, duty and expenses of sale, and their insured value. In the event, however, of the goods reaching the place of destination in a damaged state, the loss is determined by comparing their actual value at the said place with the value they would have had if they had arrived in good condition.

The loss as regards the anticipated profit included in the insurance is determined by comparing the value of the goods at the place of loading plus freight and expenses, with the value of the same goods at the place of destination ; the difference between these two values represents the indemnity due in addition to the damage to the goods, up to the amount insured. As a rule, in other agricultural insurances against damage or loss, the compensation is fixed by taking into account only the value of the interest insured at the time when the accident occurs, but this rule would obviously not be equitable in the insurance of transport, because at the moment of the accident the insured goods are travelling. Furthermore, in some cases it could not be applied at all, when for instance the ship goes to the bottom and the goods are lost. Hence recourse must be had to other standards of valuation.

Finally it is noted that on each big cereal market there are special regulations and practices likewise with regard to insurance : the policy conditions laid down on the exchanges of Odessa, Budapest, Antwerp, Rotterdam, Hamburg, Chicago, San Francisco, etc. always contain some variant, particularly with regard to the mode of payment of the premium and the free percentage. In the United States the grain-elevators obviously give rise to special conditions of risk.

The great cereal market has developed parallel with the insurance industry ; in economic history, Amsterdam is the first great grain exchange, and during the 17th and 18th centuries it represents the most important cereal market of Europe, where numerous cargoes of grain arrive from the ports of the Hanseatic cities and the Baltic Sea, leaving afterwards for the ports of the Mediterranean, particularly those of Spain and Italy. The fact that just at that period of time and in Amsterdam there are found the copies of the first policies of insurance for the risk of transport of goods is sufficient to show what assistance is afforded to the proper operation of the cereal trade by insurance institutions.

MISCELLANEOUS INFORMATION RELATING TO INSURANCE AND PROVIDENT INSTITUTIONS IN VARIOUS COUNTRIES.

AUSTRIA-HUNGARY.

HAIL INSURANCE IN 1914. — *Wallmann's Versicherungs-Zeitschrift*, No. 57, Vol. II. Laukwitz. Berlin, 23 April 1916.

In 1914 hail insurance was not so successful as in the previous year within the Monarchy, although, generally speaking, it is more important there than elsewhere.

I. *The number of insurances*, in almost all the Crown countries, as well as in Hungary, once more shows a strong decline. The causes were not the same in all cases.

In *Bohemia*, the fact as in the previous year appears to be partly due to the country having escaped injury by hail since 1909. Is this however the true cause of the reduction ? Whatever the case may be, no general rule can be drawn from this, because in *Moravia* and *Silesia* where, in 1912 and 1913 very heavy hail storms had caused damage over extensive regions and one might if anything have expected an increase in the number of insured, the contrary was the case and a considerable reduction in insurances was recorded, particularly as regards small contracts. The increase of insurances in *Lower Austria* is far from sufficient to make up for this deficit. In *Galicia* and *Bukovina* the bad harvests and critical circumstances of the last two years placed agriculture in a position which explains the falling off in insurance. In *Hungary* the deficit must be put down above all to the fact that the autumn corn fields (especially in the most prosperous regions) passed a bad winter. In consequence of this, the yield of Hungarian wheat is about 25 % below that of the previous year. Taken altogether, the yield of rye, barley and oats also shows a reduction of 20 %. It need hardly be said that this deficiency reacted on the business of Hungarian hail insurance companies

II. With regard *to the results of the year*, the following is observed :

In *Lower Austria*, *Upper Austria*, *Moravia* and *Silesia*, statistics of damages present a markedly improved appearance over 1913 ; which fact

is the more remarkable as the number of days of hail attains the exceptionally high figure of 71 and the percentage of damage declared is higher than that of the two preceding years. The injuries occasioned at the beginning of the season, which in 1912 and 1913 would have absorbed a particularly high total of indemnities, were very rare during the financial year in question. It is not until July that many cases of damage, sometimes considerable, are recorded ; in August the figures for damage are likewise more unfavourable than in the preceding year. The direction of the hail clouds having changed, the greater part of *Moravia* was spared, and for this region the financial result has remained as good as it was. *Bohemia* has been less favoured ; hail made its appearance as early as the 4th May, and in June and July a large number of claims were made, though there were fairly few in August. In *Galicia* the year has been particularly bad. The damage caused in July aggregates extremely high claims to be paid. In 1913 already the profit realised was hardly appreciable, but 1914 must really be put down as entirely a deficit year. *Hungary* also experienced a much more unfavourable year in 1914 than in the preceding year. Instances of damage were numerous during June and July. The weather conditions were unfavourable to the harvest, and the insurers were compelled to submit to a lengthy extension of the risks ; such was in particular the case with tobacco cultivations, for which the amount of damage much exceeded 100 %.

III. The operations of *assessment of the damage caused by hail* were in full swing when the war broke out. Obviously under these circumstances all action for assessment of hail damage was completely impossible for some time. On their part the farmers who had been hit by this damage naturally pressed for a settlement of the indemnity question before they joined the colours. In addition, the work of harvesting was delayed by mobilisation of the agricultural population and the requisition of draught animals, and the result to the insurers was a marked prolongation of the risks. In *Hungary*, for example, on the 1st August, 3720 cases of damage dating from the 10 last days of July, were still pending settlement ; besides which 1500 new cases were notified in August. With respect to *Galicia* in particular, the course of military operations does not allow of carrying the enquiries completely through. Yet as, in this province likewise, the greater portion of harvesting work was completed at the end of August, the number of claims outstanding or not yet notified to the companies cannot have been very important.

In *the statistics relating to insured cultivations*, we note the constant decline of the insurance of vineyards in *Lower Austria*, which was still more accentuated during the year in question, in consequence of the heavy frosts in May. Since 1908, the receipts from premiums paid for the insurance of this group have fallen off 75 %.

Insurance against hail injury of cereals in sheaf, a mode recently introduced by the companies, is gradually making headway among those concerned ; this fact emerges from the growing figure of these insurances.

IV. The following are the *returns of receipts from premiums* in the national companies from 1889 to 1914 :

1889	19.050.596	Crowns
1890	16.344.862	»
1891	14.805.268	»
1892	14.720.670	»
1893	12.331.564	»
1894	13.874.440	»
1895	12.710.550	»
1896	13.845.032	»
1897	15.470.194	»
1898	19.284.444	»
1899	20.063.026	»
1900	16.746.780	»
1901	17.377.124	»
1902	17.613.445	»
1903	17.909.735	»
1904	19.304.562	»
1905	20.325.967	»
1906	23.076.443	»
1907	20.754.449	»
1908	25.071.262	»
1909	26.982.794	»
1910	30.492.463	»
1911	29.019.807	»
1912	30.886.748	»
1913	28.855.240	»
1914	27.838.799	»

The figure for 1914 (27,838,799 crowns) covers 12 limited companies to which 23,202,694 crowns fall, and 8 mutual insurance institutions figuring for 4,636,105 crowns. The receipts in respect of net premiums (exclusive of reinsurance) amounted to 18,104,706 crowns.

V. *Average amount of insurance per policy.*

	1914	1913	1912
Bohemia	6.357 crowns	5.894 crowns	5.859 crowns
Lower-Austria, Upper-Austria, Salzburg, Moravia, Silesia	3.555 »	3.551 »	3.350 »
Galicia	8.940 »	7.913 »	6.678 »
Hungary	5.377 »	5.414 »	5.032 »

CANADA.

HAIL INSURANCE IN SASKATCHEWAN. (1) — "The Public Service Monthly, published by the Department of Agriculture," Vol. IV, No. 9, Regina, April 1916.

Municipal hail insurance, introduced in Saskatchewan by a law of 1912, continues to yield the most satisfactory results.

In the course of the year 1915, the operations effected by the hail insurance Commission, entrusted with the carrying into effect of the law, have shown a further increase. The total amount of claims paid by the Commission came to $674,984.12, or $161,259.21 in excess of the previous year. This of course entailed a corresponding increase of the costs of management and assessment. The total receipts in 1915 amounted to $917,188.96; after deducting the claims paid, costs of management and an amount of $10,000 paid into the special reserve fund, the working year left a profit balance of 196,434.27. This amount, added to the $348,391.55 carried forward from the previous year, forms a total of $544,825.82 for the net profit of three years' work.

During the financial year under consideration (1915) claims were paid to the total amount indicated above. The operations of payment began on the 15th November, and in the course of six weeks the Commission paid more than $600,000. At the end of the financial year, all the claims had been settled.

The claim is generally assessed without the least difficulty and in the fairest way. In 5,805 territorial subdivisions (out of 6,637 inspected) the assess-

(1) See the issues of August 1915 and February 1916 of this Review.

ment of the inspector was immediately accepted by the parties. Among other claims, eight related to lands which were not recorded in the land taxation list, and in the majority of other cases no agreement was arrived at owing to the fact that the farmer claimant was away or had no legal representative. Only a very small number of claims remained in abeyance owing to disagreement as to the amount of the damage fixed by the surveyors; it was only necessary to have recourse to arbitration in two cases.

The President of the Hail Insurance Commission brings into prominence as follows the advantages of municipal insurance over insurance as practised by the ordinary companies at Saskatchewan:

"A comparison of the work of the Commission and the companies for the past three years shows that for every one dollar collected by the companies from the farmers 37 cents has been returned to them as indemnities for losses sustained and 63 cents has been absorbed in expenses and profits, while in the case of the Commission for every one dollar collected 73 cents has been returned to the farmers as indemnities, 21 cents is held as a reserve fund against future abnormal losses and 6 cents has been absorbed in expenses of the Commission and commission to secretaries of municipalities".

These figures speak for themselves; it need therefore occasion no astonishment that in December 1915, twelve other municipalities affiliated to the organisation. In this way 138 rural districts were subject, in 1916, in the system of municipal hail insurance.

In compliance with an application by the Commission, the Government caused Parliament to amend the law of 1912, giving power to the said Commission to enter into individual insurance contracts with farmers residing in the districts where the law on municipal hail insurance is enforced. The conditions which may be allowed under this enactment are more advantageous to a large number of farmers, as the circumstances of each insurance will be taken into account as far as possible.

UNITED STATES.

FOREST FIRE LOSSES IN 1915. — *The Economic World;* New-York, May 6, 1916.

Although the insurance of standing timber against fire is little practised in the United States and is not a regular branch of the insurance business as it is in such countries as Norway and Sweden, it may be of some interest to note that the National cinder pile was enhanced some $ 200,000 by forest fire in 1915. Forest fires burned over not quite 300,000 acres of National forest land during the year, according to official reports just compiled, or less than 2 acres per thousand. Out of a total of 6,324 fires, 346, or 5.5 per cent, did damage to the amount of $ 100 or more.

Although the season was regarded as one of unusual exposure, owing to delayed fall rains, the loss was materially below the average of the last five years. Over 87 per cent of this loss occurred in the States of Oregon, Washington and Idaho, while more than 72 per cent was in Oregon alone. Besides the timber loss, fires destroyed reproduction, or young tree growth, of an estimated value of $ 160,000 and $ 3,407 worth of forage. The loss per fire in 1915 was $ 60.41, which is $ 14.03 less than the five-year average, while the cost of fighting each fire was $ 20.83 less.

Lightning figures as the chief cause of forest fires in 1915, as it does in the average year. Twenty-eight and a half per cent of the fires were due to this cause. Campers caused 18 per cent, which is 2 ½ per cent higher than the average. Eleven per cent were caused by brush burning. Nearly 11 per cent were of incendiary origin. Railroads were responsible for nearly 9 per cent of the fires in 1915, as against 14 ½ per cent due to this cause in the average year. The causes of over 15 per cent were unknown. Lumbering operations caused less than 3 per cent.

Part III: Credit

FRENCH COLONIES.

LAND CREDIT IN INDO-CHINA.

OFFICIAL SOURCE:

BOUDILLON (A): Le régime de la Propriété foncière en Indochine (The system of Land Property in Indo-China). A report presented to the Colonial Minister. Paris, Larose, 1915.

An inspector of registrations and State domains, M. Boudillon, was recently despatched on a mission to Indo-China with the object of studying the means by which the rules relating to landed property in that country might be rendered uniform. His report, having been submitted for consideration to the commission for Indo-Chinese legislation appointed in the Colonial department, met with its unqualified approval. We shall here reproduce, in a brief summary, the exceedingly complete information with which it supplies us on the important question of land credit.

§ 1. THE PRESENT CONDITIONS OF LAND CREDIT IN INDO-CHINA.

In the present state of Indo-Chinese legislation, the native who, with a view to using his property as security for an advance, desires to prove his exclusive right to the possession which he claims, must produce the documents recording the acquisition thereof by him. In actual practice, however, not only does it happen that transfers of real property take place without any written contract, but these deeds when they do exist may assume a form which leaves the door open for disputes and claims.

True, of course, it is necessary, in order to have record made in the land register due to the initiative of the administration of Annam, for these

deeds to be in authentic form, that is, provided with a certificate of the notables, but in the first place the record is made on presentation not of the deed itself, but of a simple abstract of no value as evidence.

Again, it is sufficient for the natives to give their undertaking the form of a French privately executed deed, in order to dispense even with such guarantee as the above certificate affords.

On the other hand it is certain that although legal precedent has never admitted anything more than the value of a mere presumption of ownership, in favour of the persons registered, as arising from the records in the land register, the public administration, by allowing the issue of extracts from these registers with the annotation : *this extract may serve as a title of ownership*, brought about a radical modification in the effect of the court decisions in question.

Finally the natives, even when provided with certificates in authentic form and in addition corroborated by the records in the land register, would not be able to demand their prima facie acceptance, because, owing to the concurrent existence of two land systems, one French and the other native, it may happen that real property which is free from all encumbrance according to the native land register is, according to the French registers of mortgages, charged with encumbrances and liens not otherwise disclosed.

Europeans are in no better position. Being subject exclusively to the French mortgage system, their rights have not, and cannot have, any certain basis other than that of prescriptive title, which, after a greater or lesser length of time, finally vests ownership in the occupant, whether or not it is founded on previous right. The only effect of the formalities fulfilled in the registers of mortgages is to render valid and binding as against third parties the contracts which form their subject, but without ever covering the flaws by which they may be tainted. Consequently, in a country where origin of title is so difficult to establish as in Indo-China, above all in respect to the period which has elapsed before a first passing of the property has been transcribed in the registers, outside claims are always to be feared, and this consideration alone deprives landed property of a substantial part of its value as security, apart even from the everpresent danger of the undisclosed charges with which it may have been encumbered after it came under the action of French law.

At the present time the Annamite in need of money adopts one of several methods.

He either effects, to one of his fellows, the *sale subject to redemption*, of one of his properties. In that case he undertakes either to deliver over the usufruct of the property to his lender as an equivalent for interest, if the loan is granted for a fairly long period, or to place his title deeds of purchase in the hands of the same vendor but paying him an interest which, though generally fixed at 36 %, sometimes amounts to 48 % or even 60 %.

Or else, he signs a simple acknowledgement of debt, without a lien upon any pledge whatever, in favour either of another Annamite of or an Indian banker, and in this case the interest stipulated again goes up to a rate of 36-60 %.

As regards the loans granted by the Indian bankers in particular, the nominal rate of interest is often only 2 % per month or 24 % per year ; but the mode of repayment adopted makes up in more than ample measure, for the apparent moderation of this figure. The principal borrowed, 3000 $ for instance, is declared repayable within a term of 20 months by monthly instalments of 160 $, computed as follows :

Principal borrowed	3,000
Interest for 30 months at the rate of 2 % per month, 60 $ × 30	1,800
Total . . .	4,800
of which 1/30 is	160

If it be noted that the monthly payment of 106 $ includes, in addition to the 60 $ monthly interest, a sum of 100 $ off the principal, it will be seen that the amount of this monthly interest should decrease regularly by 2 $ per month, and a very simple calculation renders it evident that the total sum to be paid should be, not 4800 $ but 3930 $, so that there is an excess of 870 $ bringing up the actual rate of interest to 3.87 % per month and 46.44 % per year.

The Annamite can also have recourse to a loan on crops granted by the Bank of Indo-China under the guarantee of the local administration. This however does not constitute a case of an advance upon land.

True, the loan of the Indian banker is also, apparently at least, not secured on the real property of the debtor, but in the majority of cases the repayment is not carried out with those conditions of regularity provided in the contract of bond, and the proceedings brought by the " European-ised " Indian banker resolve themselves, after a judgment of the French Court and the registration of a mortgage by Court order on the properties of the Annamite, into a compulsory expropriation and sale. The conditions are therefore quite different in these two cases.

The European, on the other hand, only has recourse, and can lawfully only have recourse, to a loan by covenanted mortgage contracted before a notary ; the rate of interest generally stipulated is 12 % per annum. These loans are mostly contracted from private persons.

Another mode of utilisation of land credit, however, must not be omitted : the Bank of Indo-China, although it does not on principle grant mortgage loans, nevertheless requires a collateral guarantee in the form of a covenanted mortgage in certain cases, from manufacturers or traders owning real property to whom it has granted large advances under the conditions laid down by its articles.

It is obvious that the very onerous rates of interest above referred to do not merely represent the rent of the money lent ; although French capital shows a reluctance to invest in the French colonies, the wealth, or at any rate the comfortable position gained by some inhabitants, even among the native part of the population, would be sufficient to bring about a di-

minution of the interest demanded by the constant increase of supply ; the risks of non-repayment however, wholly or in part, are such, owing to the insecurity of landed property, that the premium of insurance against these risks remains fixed at a considerable figure.

It would moreover be fruitless to endeavour to bring about the desired reduction by legislative measures, particularly by a limitation of the rate of interest in private loans. Capital, so readily frightened away, would absolutely disappear, and the land owners would forthwith be unable to find the funds of which they might be in need. The reform of the land system alone would be capable of bringing about the desired result : on the day when the security offered is clearly defined both physically and legally, and when consequently the money advanced on the strength of this security is fully guaranteed, the sum described as interest could straightway be reduced by the whole or almost the whole of the part representing the consideration for the possibility of non-repayment,

M. Boudillon thought it would be of interest to supplement these few summary particulars on the present condition of the utilisation of land credit in the various parts of Indo-China by presenting, in the four tables which will be found condensed on later pages, statistics of the loans obtained by land owners and secured either by a covenanted mortgage executed forthwith, or by a mortgage constituted later by Court order.

There was no possibility of preparing a statement showing the loans between neighbours in the form of redeemable sales ; this description of deed is, it is true, in principle subject to compulsory registration, and almost all of them, at least in Cochinchina, are in fact registered and then recorded in the land register. But a task of this kind, which would have entailed the examination of all the land registers of Cochinchina and the deed registers kept in the chief towns of all the provinces of the colony, was not to be thought of. The results which will be presented below were therefore gathered by M. Boudillon in the various mortgage recording offices alone. They relate to the contracts or bonds entered into between Europeans in the first place, between Europeans and natives in the second place, and finally between natives themselves, but executed according to French legal enactments. Only two kinds of claims on the security of real property were taken into account :

(1) Covenanted mortgages granted voluntarily by borrowers to their lenders, loan institutions, bankers or private persons ;

(2) Mortgages by court judgment obtained by Indian bankers against their debtors ;

In the first category there were not comprised :

(*a*) The registrations of covenanted mortgages granted as security for claims of a kind other than loans proper, such as those of the " compradores " of Banking houses having charge of the operations with Annamite or Chinese merchants :

(*b*) Mortgage registrations made either at the application of the parties or ex officio, for the conservation of vendors' privileged rights and liens,

as the debt contracted for payment of the price of a sale on the instalment plan cannot be assimilated to a loan.

In the second category account has only been taken of the registrations of mortgages by court judgment In the proceedings of Indian bankers against one of their debtors, excluding registrations of the same kind between traders, for instance, as a result of an action for the payment of the price of goods, as here again there is no question of a loan. Nevertheless, there have been included in the loans of Indian bankers those granted by Annamite lenders to borrowers of the same nationality.

Altogether the sums set down in the two parts of the following statements represent with fair accuracy the amount of the actual loans made under the system of French law from 1902 to 1911. For this latter year however the results recorded are those of the first ten months only.

TABLE I. — *Statement showing, in regard to Cochinchina, the amount of mortgage security provided by landed property from* 1902 *to* 1911.

Years	Covenanted mortgages					Mortgages by court judgment				
	Registrations		Average rate of interest	Removals (3)		Registrations		Average rate of interest	Removals (3)	
	Number	Amount (piastres)		Number	Amount (piastres)	Number	Amount (piastres)		Number	Amount (piastres)
1902 . .	89	557,800	15 %	62	316,000	124	146,300	20 %	43	64,000
1903 . . .	(2) 96	2,248,000	15 %	56	316,000	83	111,775	23 %	45	65,250
1904 . .	131	979,850	16 %	77	601,850	151	222,300	21 %	67	116,800
1905 . .	135	818,025	16 %	80	406,650	193	335,825	24 %	95	172,250
1906 . . .	113	869,400	16 %	65	386,200	192	544,775	22 %	99	286,375
2907 . . .	143	1,231,050	16 %	61	270,250	156	274,175	25 %	59	117,175
1908 (1) .	152	1,578,150	19 %	56	226,200	227	530,125	25 %	76	203,225
1909 . . .	244	1,376,675	20 %	75	359,925	235	714,975	24 %	61	278,150
1910 . . .	242	2,215,675	19 %	42	118,775	124	387,400	24 %	30	88,050
1911 . . . (first 10 months.)	215	2,822,975	18 %	11	22,800	222	561,850	24 %	11	12.450

(1) Three provinces of South Annam were, from the 1st January 1908, attached to the mortgage record office of Saigon.

(2) The number of mortgages demanded by the Bank of Indo-China, as collateral security, amounted in 1903 to 6, for a total of 1,800,000 piastres.

(3) The figures in the columns headed "Removals" show the amount, in reference to the figures for the corresponding registrations, of the cancellations of mortgage granted at the end of the year 1911.

TABLE II. — *Statement showing, in regard to Cambodia, the amount of mortgage security provided by landed property from* 1902 *to* 1911.

Years	Covenanted mortgages					Mortgages by court judgement				
	Registrations		Average rate of interest	Removals (2)		Registrations		Average rate of interest	Removals (2)	
	Number	Amount (in piastres)		Number	Amount (in piastres)	Number	Amount (in piastres)		Number	Amount (in piastres)
1902 . .	4	26,500	15 %	4	26,500	5	9,600	26 %	5	9,600
1903 . . .	2	12,000	17 %	1	6,000	3	2,600	20 %	3	2,600
1904 . . .	5	97,750	11 %	1	4,000	2	2,000	24 %	1	1,000
1905 . . .	3	15,000	11 %	1	7,000	2	4,500	30 %	2	4,500
1906 . . .	12	67,800	13 %	8	33,300	3	1,300	28 %	2	600
1907 . . .	4	96,500	14 %	2	31,500	3	24,656	25 %	—	—
1908 . . .	7	40,600	10 %	3	9,100	2	1,000	24 %	1	700
1909 . . .	11	107,000	14 %	5	13,000	1	800	24 %	—	—
1910 . . .	11	77,900	13 %	1	4,000	—	—	—	—	—
1911 (First 10 months)	20 (1)	697,200	10 %	—	—	—	—	—	—	—

(1) The number of mortgages as security demanded by the Bank of Indo-China, by way of collateral guarantee, amounted in 1911 to 5, for 578,000 piastres.

(2) These figures show the amount of the cancellations of mortgage at the end of the year 1911.

TABLE III. — *Statement showing, in regard to Annam, the amount of mortgage security provided by landed property from* 1902 *to* 1911.

Years	Covenanted mortgages					Mortgages by court judgment				
	Registrations		Average rate of interest	Removals (2)		Registrations		Average rate of interest	Removals (2)	
	Numb	Amount (piastres)		Number	Amount (piastres)	Number	Amount (piastres)		Number	Amount (piastres)
1902 . .	11	34,600	11 %	6	18,800	—	—	—	—	—
1903. . .	6	17,300	12 %	5	9,300	—	—	—	—	—
1904. . .	9	62,100	10 %	7	58,225	—	—	—	—	—
1905 . .	1	3,000	12 %	1	3,000	1	1,300	18 %	—	—
1906. . .	8	81,000	12 %	3	33,150	1	22,500	24 %	—	—
1907. . .	11	57,450	11 %	5	22,050	—	—	—	—	—
1908 (1) .	7	27,375	12 %	3	7,900	—	—	—	—	—
1909. . .	6	49,500	10 %	—	—	—	—	—	—	—
1910. . .	9	60,650	11 %	1	4,000	—	—	—	—	—
1911. . . (first 10 months.)	8	26,500	13 %	—	—	—	—	—	—	—

(1) From the 1st January 1908, three provinces of North Annam were attached to one of the mortgage offices of Tonkin, and three provinces of South Annam to the mortgage office of Saigon.

(2) The figures set down in the " Removals " columns show the amount relatively to the figures of the preceding registrations, of the cancellations of mortgage granted at the end of the year 1911.

TABLE IV. — *Statement showing, in regard to Tonkin, the amount of mortgage security provided by landed property from* 1902 *to* 1911.

Years	Covenanted mortgages					Mortgages by court judgment				
	Registrations		Average rate of interest	Removals (2)		Registrations		Average rate of interest	Removals (2)	
	Number	Amount (in piastres)		Number	Amount (in piastres)	Number	Amount (in piastres)		Number	Amount (in piastres)
1902 . . .	49	343,525	11 %	39	135,750	—	—	—	—	—
1903 . . .	56	488,300	12 %	47	415,400	—	—	—	—	—
1904 . . .	48	349,975	12 %	33	196 475	—	—	—	—	—
1905 . . .	63	375,200	14 %	40	255,300	—	—	—	—	—
1906 . . .	82	510,850	14 %	31	175,175	15	9,600	36 %	6	4,950
1907 . . .	91	393,400	19 %	48	204,825	35	13,650	36 %	12	4,975
1908 (1) .	80	336,200	19 %	40	202,300	31	14,700	36 %	15	9,175
1909 . . .	55	328,225	13 %	17	147,225	18	8,750	35 %	4	3,350
1910 . . .	98	149,350	16 %	17	26,150	18	10,125	36 %	9	5,575
1911 . . . (first 10 months)	48	186,300	11 %	3	4,500	18	13,275	33 %	7	4,125

(1) From the 1st January 1908, three provinces of North Annam were attached to one of the mortgage offices of Tonkin.

(2) The figures set down in the columns of "Removals" show the amount relatively to the figures for the previous registrations, of the cancellations granted at the end of the year 1911.

Although these tables speak very clearly for themselves, M. Boudillon appended to them the following comments and observations:

The development of land credit in Cochinchina has been truly remarkable during the period under observation.

In the matter of covenanted mortgages, in the first place, the amount of mortgage registrations which, in 1902, barely exceeded the half-million, rose suddenly in the following year to four times that sum, and for three years after that remained slightly below one million; it again passed beyond this figure in 1907, without ever going below it afterwards, and finally, in 1910 and 1911, amounted to 2 and 3 millions.

As regards the interest, some astonishment might be felt at the high level of some averages. It would seem generally that the rate tends to become higher and higher; the reason is to be found in the fact that the crea-

tion of offices for the provinces has contributed to the substitution of notarial deeds of bond with mortgage security for the native deeds of loan against delivery of titles, but without any change in the rate of interest in consequence, in the relations between Annamites in the interior of the colony ; at Saigon itself moreover the average rate of interest tends to become fixed in the neighbourhood of 14% ; it rose, it is true, in 1910 and 1911, to 19 and 16 %, but this was due to certain bonds subscribed in the provinces of South Annam, attached in 1908 to the office of Saigon, providing 36 % as the rate of interest.

With regard to mortgages registered by court judgment in favour of Indian bankers, there may also be noted a regular increase of the number of registrations from 1902 to 1909; during the two years 1910 and 1911, however, the figures reached are notably lower ; this is due in some measure to the fact that the Bank of Indo-China, which had not hesitated for many years to allow fairly large advances to Indian bankers, on the ordinary security, completely gave up this class of operations.

From the point of view of the average rate of interest, one may note that hardly any variation occurs. This rate of 20 %, apparently below the usually accepted rate, is nevertheless, owing to the method of computation adopted, a positively usurious rate.

The results obtained in Cambodia show how far the organisation of the mortgage registration offices is from answering the requirements of the people there. There is, no doubt, progress observable in the number of the registrations made in the course of the ten years under observation, but that of the year 1911 is quite exceptional and due to causes which will only recur quite exceptionally. As to the operations of the Indian lenders, they are vastly less developed in Cambodia than in Indo-China ; they even seem to be on the downward path, because it is very difficult to suppose that they were unable to bring as many actions as in the past, and that their debtors had paid up accurately of late years.

The situation of Annam from the point of view of land credit very much resembles that of Cambodia. The application of the French mortgage system to the real properties possessed by the settlers is certainly legal, but the results obtained from the point of view of the development of land credit are insignificant. Annam, on the other hand, is not very favourable ground for the operations of the Indian bankers ; at any rate their industry appears here to be pursued on no very great scale.

In conclusion, the perusal and examination of the table of the mortgage security furnished by the landowners of Tonkin calls forth rather painful reflections. Indeed, while during five years the sum representing covenanted mortgages registered constantly grew, rising from 350,000 $ to 500,000 $, it on the contrary fell again successively to 400,000 $ and 300,000 $ in 1907 and 1909, and then to less than 200,000 $ in 1910 and 1911.

The prosperity created by the execution of the great works at Hanoi at the beginning of the century may justify the progress in the first few years, but the crisis which followed this active period is in itself insufficient

to explain the subsequent decline. Among the other causes there are certainly included, in M. Boudillon's view, the inadequacy of the land system which, having been unable to afford a solid basis for property rendering it secure against claims, absolutely prevents the landowners from finding the capital of which they stand in need to develop their lands, and even makes them hesitate to employ their own capital in any undertaking extending over a length of time.

The registrations of mortgage by court judgment are in no great number ; the Indian bankers have only tried to carry on their industry in Tonkin for a few years ; moreover they at once called forth the competition of some Annamites possessed of capital. The results at the present day do not allow of drawing any conclusions of sufficient interest, except that the rate of interest at 36 % remains deeply rooted in practice.

M. Boudillon however has no hesitation in declaring that it is not permissible for this enormous rate of interest of 36 % to continue to be imposed on the native population.

Even with all the imperfections of the mortgage system, French landowners find a lender at the annual rate of 10 to 12% for the capital they require. One may therefore, without being over-venturesome, maintain that if the native landowners could offer the same guarantees, or rather, with an improved land system, still more substantial guarantees, they could address themselves to the same lenders and obtain the same terms. Indeed terms preferable to these might even be obtained by both. There is no shortage of capital. The funds for the establishment in Cochinchina of extensive rubber plantations were found on the spot, and if the capitalists who have turned their attention in this direction are at liberty to hope for ample remuneration in the future on the sums advanced, it is nevertheless true that for several years they must regard these sums as totally unproductive. The fact which always ensured the success of all appeals made by the founders of the companies in question was not only the prospect of a considerable future profit, but facility of disposal of the shares. With a land system common to land owners without distinction, a simple system of giving both natives and Frenchmen absolute rights, these same capitalists or others would no doubt accept a lower remuneration for their investment on condition that the latter is free from all risk, and that furthermore they are certain of being able at any time to effect its complete and immediate withdrawal in one way or another.

§ 2. The reorganisation of land credit in Indo-China.

Is there a remedy for this state of things, and can the remedy be one and the same for all the countries which form French Indo-China ?

It should be noted, says M. Boudillon on this point, that in the Indo-China peninsula, keeping to the great ethnical divisions, there are found two principal groups of population : the Annamites on the one part, with Chinese

civilisation, who occupy Cochinchina, Annam and Tonkin, the Khmers, on the other part, possessing Hindoo culture, who people Cambodia and Laos. All the territories which formed the old empire of Annam were formerly subjected to a uniform law, suggested by the Chinese codes, and the sometimes considerable differences at the present time observed in the written enactments or established customs prevalent in Cochinchina, Annam and Tonkin respectively, are chiefly due to the changes occasioned in the political organisation of those countries by the advent of Europeans ; consequently, there appears to be no reason forming an obstacle to the restoration, not immediate and complete — the differing political constitutions of Cochinchina as a colony and Annam and Tonkin as protectorates render such a measure questionable — but progressive and methodical, of one and the same legislation in the matter of the land system.

On the other hand, although the Cambodian codes exhibit a very markrd originality, one detects without very great difficulty in the enactments dealing with the constitution of land ownership and the exercise of realty rights, provisions which are not devoid of analogy with those of the Annamite codes and customs on the same subject. Therefore, the French protectorate in Cambodia, having first been exercised under the authority of the Governor of Cochinchina, and later on under that of the Governor General of Indo-China, the Cambodian legislature has obviously repeatedly sought inspiration from the institutions in vogue in the Annamite countries, without any difficulties having been experienced on that account in the enforcement of the innovations thus made.

Again, though the same reasons cannot be alleged in explanation, it is nevertheless quite certain that the land system instituted by the Siamese government in the territory of Battambang was based on the same principles as the Annamite land system.

Finally the member of the judiciary who was entrusted with the task of drafting the codes of Laos did not for one instant hesitate to introduce into his work, in the form of categorical enactments, the principal rules of Annamite law, as they had been formulated by the practice of the courts of Cochinchina, particularly as regards the modes of constitution and transmission of real estate rights.

It seems to Mr Boudillon and to the Indo-China legislation Commission that one cannot do better than persevere along the same path, and look for the practical solution of the difficulties already encountered, and those which might arise subsequently, in a unification of the land systems established in the various countries of the Indo-Chinese Union.

Yet, either because the establishment of French authority is in some regions of too recent date, or because this authority is not exercised everywhere in the same direct form, the Indo-China populations are not yet able to understand the spirit of the reform to be made, and to submit thereto without a transitory period. While in Cochinchina the Annamites, by daily contact for more than fifty years with Europeans, have become initiated into their administrative practices, and would be in a position to afford effective assistance to the local administration for enforcing the reform, the

case is different in the greater part of Cambodia and Annam, where the action of the French authorities consisted chiefly in guiding the local powers in the fulfilment of their task and checking the execution of the measures taken at its suggestion; finally, in Laos for instance, and also in some regions of Annam and Cambodia, the results of European intervention are as yet relatively speaking not very perceptible.

In the view of M. Boudillon and the Commission of Indo-Chinese legislation, a general reform might be studied, having for its object the final unification of the land systems throughout the extent of the territory forming French Indo-China, but on condition that its enforcement in each of these territories be straightway taken in hand only with scrupulous allowance for the importance which the position of land presents in the eyes of the respective inhabitants, and the advantages which the improvement of the system governing the relations between this land and these holders might bring to them in the development of their resources and the satisfaction of their needs.

Finally, the unification would be carried out, not on the basis of the French mortgage system, but on the basis of the native land register, in which of course the necessary improvements would be made. French landowners, moreover, would be unable to regard the reform thus inaugurated as an encroachment on their prerogatives, because in Tunisia and all the French colonies where the legislature has instituted a system of publicity of land rights based on the principle of the registration of the lands in the land register, the French population has always very rapidly familiarised itself with the obligations imposed on it by this system. Moreover, for a long time past, the necessity of the reform has been pointed out, both in Cochinchina and Tonkin, by local assemblies, composed for the major part of Frenchmen.

The proposed organisation of land registers, carrying with them unassailable land certificates issued to the owners, and certificates of mortgage registrations handed to the holders of real property liens and transferable with the same facility as any registered personal security, would allow of raising the necessary capital for the development of the land without difficulty. The lender, once he was in a position to secure positive information as to the value of the pledge offered him, and also knew that he could, whenever he liked, find someone to transfer his claim to, would no longer have any hesitation in parting with his money, even for a long period.

The borrower on his part, being able to offer a solid guarantee, could claim a thoroughly favourable treatment from the point of view both of interest and time of repayment.

Thus the position on both sides would be remarkably modified.

Furthermore, the employment of capital advanced on real property for the development of the country might even be conceived as taking place under the same conditions as in the mother country, *viz*, the creation of a special credit establishment appealing for the investment of public savings by the issue of bonds in the nature of personal securities, in order

to get together funds to be placed at the disposal of land owners in the form of long date loans repayable by annual instalments.

This idea, for the rest, is not new; it had long been advocated above all in Cochinchina, and was in fact applied for the first time some years ago by the formation of a bank, which had only a brief existence.

The *Bank of Cochinchina* carried out only some twenty loans, and found itself forced almost immediately to go into liquidation.

The causes of this failure are manifold; only a few, adduced by M. Boudillon, must be pointed out here.

In the first place, undoubtedly the want of a sure basis of property rendered the guarantees given to the bank by borrowers almost illusory. A private person desirous of making a fruitful investment of funds available at the moment, may, when selecting the most advantageous among the different businesses proposed to him, hope to find a reliable and accurate debtor; the case is quite otherwise with a financial establishment. Its object being to bring within reach of the public the sums required for the development of the country, it must grant the largest possible number of applications for loan, on pain of leaving the capital at its disposal unproductive; no doubt it is true that the carrying out of such a programme does not imply the complete disregard of the precautions which must be reasonably taken before concluding the proposed business, but in spite of this it is open to no doubt that all this business cannot present itself under the same conditions as to safety and that some of it necessarily entails a greater or lesser amount of risk. This position was rendered still worse, and the likelihood of success of the bank seriously imperilled, by the mere fact that local legislation offered those who had thought themselves in a position to make an endeavour in this direction no effective means of guarding themselves against mistakes and protecting themselves against fraud.

The primary condition indeed, in order to render possible the creation of a land bank, was the preliminary organisation of a land system. How could one avoid misgiving when one had to deal with landowners or persons claiming to be such, who could produce nothing in proof of their right but copies of more or less uncertain entries in land books kept in rudimentary fashion? Was there any certainty that liens on the property did not exist beyond those mentioned in the official registers? Were the extracts delivered in actual agreement with the registers themselves? Did not perchance the apparent owner whose name alone appeared on the documents represent an entire family, and possess nothing but a minute share in the collective property? Were not the genuine title deeds, the deeds of purchase in due form, already in the hands of other lenders, who had themselves received the property to be mortgaged as security? To all these questions there was no certain reply possible.

It was impossible for the Bank of Cochinchina to withstand these difficulties. Until the land reform is an accomplished fact, any formation of a land bank will not survive its birth.

Once this reform has been realised however, what land credit operations could be carried out?

It appears necessary to make a clear distinction in this relation between :

(1) The long date mortgage loan, repayable by annuities ;

(2) The short date mortgage loan, with deferred registration.

The former requires no definition. It need hardly be said that the value of money being considerably higher in the colonies than in the home country, the rate of interest to be paid by the borrowers would necessarily have to exceed that which serves as the basis for calculating the annual payments in France ; but as we have said, the conditions as to security would be quite different from those now prevailing, and the new rate would have to descend not only much below the Annamite rate of 36 % and the current rate of 24 % adopted by the Indian bankers, but also that of 12 % practised among Frenchmen.

Under these conditions, in view of the average yield of rice fields, the loan, even if granted on the security of landed property, would be easily repaid by the native, while at the present time the Annamite who borrows is perforce driven sooner or later to part with his patrimony, whether he has mortgaged it or simply pledged it.

With regard to the short date loan, it would constitute an innovation, at least as far as concerns the mode of publicity ; it would, for the rest, be in complete accordance with the local usages. Moreover it would afford fresh assistance to the small land owner, to whom the loan on crops is not always a sufficient source of aid ; the Annamites readily borrow larger or smaller sums, undertaking to repay them with the selling price of their rice, and making their contracts in the form of redeemable sales ; thanks to the short term loan they would henceforward find a lender without having to expose themselves to the very often disastrous consequence of these alienations.

Within what limits could the two descriptions of operations be effected ?

To M. Boudillon's mind, it is beyond doubt that a land credit establishment would find itself induced to operate above all in the urban centres.

No doubt the needs of rural property are at the present time considerable ; it is in truth necessary, in order to expedite the development of the country, to replace the almost exclusive growing of rice by other cultivations likely to be adapted both to the nature of the soil and the character of the inhabitants, but this work cannot be done without a considerable quantity of funds.

Prudence however will compel the land credit establishment which might be created not to participate in this movement otherwise than with the greatest precautions.

On the other hand, applications for loans from town property owners might be met much more easily. In all the towns of Indo-China built property has a selling value and letting value which constitute it a sure pledge to the lender both of the repayment of the principal and the payment of interest. One may even hope for a more or less rapid development of some of those towns, so as to justify providing the owners of unbuilt lands on their territory, with funds for the erection of new buildings.

As regards the loans to be made to rural landowners, M. Boudillon is of opinion that the following observations must be taken into account :

This class of operation would, in principle, be possible in sufficiently populated provinces, where the whole of the soil is appropriated. Each formed property, in that case, by reason of this general appropriation, possesses a sure value, likely evidently to vary in a certain measure according to the condition of cultivation, but nevertheless certain. It therefore in every case forms an appreciable guarantee, and the question which arises is, what would be the relation between the value of a piece of land and the amount of the loan for which it can be security ?

On the other hand, in the regions where waste land still abounds, appropriated parcels possess but the smallest intrinsic value, in fact hardly any. It is well known to everyone that the landowners, with the object of evading the obligations incumbent upon them in consequence of the loans they have contracted, do not hesitate to abandon properties which they have encumbered with rights or charges which they find too onerous, and go and settle at some other point of the territory ; these properties falling out of cultivation, at once lose all value, and if put up for sale will find no buyer.

It may be objected, no doubt, that Indian bankers sometimes allow themselves to be induced to grant loans on such properties, but besides the fact that they stipulate a high rate of interest, reaching a figure near 4 % per month as was seen, which counterbalances to a large extent the risks undertaken, these same lenders possess means of watching over the doings of their debtors which enable them to prevent any neglect or default in the execution of the engagements entered into. A credit establishment would be devoid of both these resources, as it would have to lend at a reasonable rate and could not conduct operations otherwise than at its desks.

Consequently, it would be desirable, to begin with, for the land bank to abstain almost completely fram making any loan in the provinces where there is still much uncultivated land, and to lend money only with the utmost circumspection in the other provinces.

It need hardly be added that no loan could be granted on uncultivated land. If an application to this effect were made by a native or European, it could only be complied with by opening a credit to be realised as and when the work of bringing under cultivation advances.

As results from the foregoing explanations, the operations of the land bank could only be undertaken in respect to registered properties, that is, those subject to the system common to all the elements of the population. The establishment could then, within a brief space of time, recruit its clients first of all among all the inhabitants without distinction of the surveyed regions of Cochinchina ; on the one hand, from the French concessions of Hanoi, Haiphong and Tourane, on the other, even among these of the town of Phnom-Penh ; in the second place among the owners, other than natives, of real properties situate either in the provinces of Cambodia or in those of Annam and Tonkin. Little by little this field of action would be extended to the provinces successively endowed with land registers in

Cochinchina and Laos, until later on, the definitive land system had covered the native populations of Annam, Tonkin and Cambodia.

It would therefore be sufficient at the outset to establish agencies of tha land bank at Saigon and Hanoi, and later on only, when the application of the land system had sufficiently progressed in the various countries of the Union, new agencies might be created gradually at Haiphong, Phnom-Penh, Tourane, Vientiane, Kouang-Tchéou-Wan, etc.

M. Boudillon entertains no doubt that an institution of this kind, organised with prudence, while offering a fair remuneration on the capital supplied by its founders, would be in a condition to supply the funds required for the development of Indo-China under conditions advantageous to the borrowers.

ITALY.

AGRARIAN AND LAND CREDIT IN ITALY DURING THE FIVE YEARS 1910-14.

SOURCES:

La Legislazione Italiana sul Credito Agrario (*Italian Legislation on Agrarian Credit*). A historical and agricultural survey, by the Advocate Alessandro Baccaglini. Laws, decrees and regulations. Statistical information. Annali del Credito e della Previdenza: Year 1911, No. 90. Ministry of Agriculture, Industry and Commerce. General Direction of Credit and Provident Institutions, Cooperation and Social Insurance. Rome, Tipografia Nazionale di G. Bertero, 1911.

Annuario Statistico Italiano (*Italian Statistical Year-Book*). Second Series. Vol. IV. Year 1914. General Direction of Statistics and Labour. Rome, Tipografia Nazionale di G. Bertero, 1915.

It is our practice to publish in each year two articles, one dealing with the work of the special institutions of agricultural credit, the other with that of special land credit institutions. We think it desirable to-day to append to these articles, which are of an analytic character, another in the form of a digest, that is to say, in which, after a few references to the organisation of agrarian and land credit in Italy, we set out the principal data as to the work as a whole performed during the five years 1910-1914, by the various institutions of agricultural and land credit operating in the country.

§ 1. The organisation of agricultural credit on the basis of special laws and the operations of the agricultural credit institutions in the years 1910 to 1914.

Italy, with regard to the organisation of agricultural credit, may be divided into two parts: one comprising Piedmont, Lombardy, Venetia, Emilia and Tuscany; the other Liguria, the Marches, Umbria, Latium, the Continental South and the Islands. In the first part the organisation of credit has originated from the spontaneous initiative of the farmers, who

combined for that purpose into cooperative societies (popular banks, rural funds, etc.,) themselves providing for the needs of credit ; in the second, on the other hand, private initiative was feebler and had to be supplemented by State action. Thus there came about the various laws on agricultural credit which, in keeping with the particular requirements of the several regions of central, southern and insular Italy, founded special credit institutions there. The principal of these laws is that of the 7th July 1901, authorising the savings bank department of the Bank of Naples to carry on agricultural credit in the Southern provinces of Continental Italy and the island of Sardinia, and that of the 29th March 1906 establishing in the Bank of Sicily a section for the conduct of agricultural credit. Reference may also be made to the laws of the 1st December 1902, 31st March 1904 and 25th June 1906, relating respectively to agricultural credit in Latium, Basilicata, Calabria, etc.

The fundamental end to which this legislation is directed is the providing of credit to farmers, not directly, as a rule, but through the agency of local institutions, preferably in cooperative form, which are for that reason described as *intermediate bodies*. These bodies are for the most part rural funds or societies, popular banks, agricultural unions, etc. ; and as they were rather few in number in the South of Italy and the Islands, the said laws made provision for encouraging their formation by prize competitions and other means. During the last few years numerous *agrarian societies* have arisen, considerably increasing the number of the existing intermediate bodies. These are usually credited by the various central credit institutions (Savings bank department of the Bank of Naples, Agricultural Credit section of the Bank of Sicily, Agricultural Credit Institute for Latium, etc) with a given sum fixed in relation to their importance and the guarantees they can offer.

The operations which the two Banks named — the most considerable in Italy for the conduct of agricultural credit — are authorised to carry on by the respective laws, are essentially reduced to she following :

(*a*) Discounting of bills of exchange issued by farmers for the various purposes of their business, and transferred to the intermediate bodies ;

(*b*) Discounting of bills of exchange issued direct by the latter, either in order to procure the necessary funds for the collective purchase of supplies useful to agriculture, or in order to make advances to members in case of collective sales of their produce, etc.

In order that this should be done, however, it is necessary that proof should be furnished of the agricultural purpose of the loan. With this object the persons of the borrowers are specified, who must be the owners of lands managing their estates direct, leaseholders, persons renting lands against part-produce rent or produce-sharing settlers, and tenant farmers ; it is also provided that the farms or lands for the benefit of which the loan is required shall be situate within the boundaries of the zone in which the supplying institution carries on operations, and the purpose of such loan shall be stated in the application for it.

The loans must be contained within certain maximum limits of amount and duration (though of course they may be less in case of lesser need) fixed respectively at 1000 lire and one year for loans enjoying a lien by operation of law (i. e. in respect of harvesting, cultivation, seeds, manures, materials for fighting cryptogamic diseases) ; 2000 lire and three years for loans intended to provide farms with cattle, and 3000 lire and three years for loans required for the purchase of machines.

As has been pointed out, the loans cannot in the ordinary course be made to individual farmers, but to intermediate bodies, among which preference must be given to those having exclusively agricultural character and objects.

The said loans must be granted by the two Banks named at a maximum rate of 4 per cent. to the intermediate bodies, and by the latter to its own members at a rate not exceeding 6 per cent. They are secured by the intermediate institutions on the capital possessed by them, if their liability is limited, and on the property of the members of the intermediate institutions if their liability is unlimited. The amount of possible loans therefore varies as a function of the capital and form of guarantee of the institutions. The latter in turn enjoy special privileges towards their members : a lien by operation of law, laid down by article 1958 of the Italian Civil Code and referred to above, and a lien or privilege by covenant, created by the law of the 23rd January 1887, in reference to sums due for having supplied properties with live and dead stock, agricultural machinery and implements, implements for the handling and treatment of rural produce and all else that may be required for the carrying on of agriculture.

Such is, in main outline, the operation of agricultural credit as regulated by the State in the Bank of Naples and of Sicily.

In Basilicata and Sardinia, on the other hand, according to the special laws of the 31st March 1904 and 10th November 1907 (sole text) there is a special form of distribution of agricultural credit, in the shape of advances. It takes place in the following form : the central credit institution (Central Society of Agrarian Credit for Basilicata, with head office at Potenza, and « Casse ademprivili » for Sardinia, at Cagliari and Sassari), instead of rediscounting the farmers' bills for the intermediate bodies or granting them direct bill accommodation, supplies advances in money and in kind, up to a maximum of 10 thousand lire, repayable in a certain number of years to the intermediate bodies, which then provide for their own account for the loans to the individual farmers.

The foregoing applies to working credits, that is, credits or loans for the object of enabling farmers to meet expenses for sowing, manuring, cultivating and harvesting, and also equipping their farms with live and dead stock, machinery and implements ; as regards however the credits or advances for improvement of property, i. e. for the construction of settlers' houses, stables and sheds on rational lines, farm roads, work of irrigation, and changes of cultivation, they are governed only by the special laws for Basilicata and Sardinia, and consist in advances to owners, leasehold-

ers and cooperative agricultural societies for the above purposes. These advances are guaranteed by mortgage, repayable in a maximum period of 50 years, on the system of gradual repayment, and may also be secured, by an agreement, by a special lien on the greater value acquired by the property as a result of the improvements. The rate of interest cannot for these advances exceed 4 per cent., except in the case of advances for the construction of settlers' houses and rational stables and stalls, which must be granted at 2.50 per cent., the difference between the favoured rate and the normal rate being payable by the State.

Having premised this much, we draw attention to the data contained in the following tables, prepared by the General Direction of Credit and Provident Institutions, on the operations carried out in the five years 1910-1914 by the various special institutions of agricultural credit :

TABLE I. — *Operations carried out by the Institutions of Agricultural Credit in the years* 1910 *to* 1914.

Years	Active intermediate bodies	Rediscounts		Direct discounts		Direct loans		Total	
		Number of operations	Amount — Lire	Number of operations	Amount — Lire	Number of operations	Amount — Lire	Number of operations	Amount — Lire
				Savings Bank Department of Bank of Naples.					
1910 .	140	12,421	6,061,413.05	244	1,629,312.54	125	139,675.00	12,790	7,830,400.59
1911 .	185	17,207	7,469,503.28	278	2,029,700.84	149	155,009.00	17,634	9,654,213.12
1912 .	214	18,296	7,158,973.55	270	2,104,868.89	70	89,991.00	18,636	9,353,833.44
1913 .	230	22,198	10,347,106.71	253	1,821,588.16	137	865,645.75	22,588	13,034,340.62
1914 .	245	25,150	10,933,853.35	403	2,434,548.20	139	565,757.85	25,692	13,934,159.10
				Agrarian Credit Section of the Bank of Sicily.					
1910 .	155	25,490	6,089,063.58	145	999,201.78	103	31,455.00	25,738	7,119,720.36
1911 .	193	30,766	7,852,904.57	198	1,262,692.58	83	22,374.99	31,047	9,137,972.14
1912 .	211	37,818	9,990,308.72	287	2,035,327.09	69	13,755.00	38,174	12,039,390.82
1913 .	257	48,290	13,374,781,01	371	2,245,375.70	51	8,475.00	48,712	15,628,631.71
1914 .	272	38,764	9,734,464.94	397	3,959,619.84	125	52,075.00	39,286	13,746,159.78

Agrarian Credit Institute for Latium

Years	Intermediate bodies	Operations with intermediate bodies — Lire	Direct operations with farmers — Lire	Total — Lire
1910	99	7,070,362.99	1,145,431.60	8,215,794.59
1911	109	11,840,671.00	1,283,760.40	13,124,431.40
1912	113	8,660,587.88	1,212,236.85	9,872,824.73
1913	117	7,431,194.65	1,188,112.55	8,619,307,20
1914	?	7,953,514.06	1,274,697.15	9,228,211.21

Years	*Institute of Agrarian Credit Vittorio Emauuele III for Calabria*						*Provincial Agrarian Credit Fund for Basilicata* (*Position at end of year*)	
	Loans to farmers		Loans to Associations and Agricultural Societies		Total		Advances to Monti frumentari and Agricultural Societies and Associations	Advances for Agricultural improvements
	Number of Loans	Amount — Lire	Number of Loans	Amount — Lire	Number of Loans	Amount — Lire	— Lire	— Lire
1910 . . .	969	985,776.00	6	89,000.00	975	1,074,776.00	307,070.26	379,876.20
1911 . . .	1,013	1,012,735.23	6	60,000.00	1,019	1,072,733.25	326,337.29	662,302.27
1912 . . .	847	803,916.22	5	30,000.00	852	833,916.22	302,452.27	885,657.37
1913 . . .	1,096	1,071,113 00	8	66,000.00	1,104	1,137,413.00	456,567.96	1,049,291.49
1914 . . .	1,487	1,368,692.50	8	35,poo.00	1,495	1,403,692.50	758,979.07	1,341,233.97

Years	*" Ademprivile " Fund of Cagliari* (*Position at end of year*)				*" Ademprivile " Fund of Sassari* (*Position at end of year*)			
	Working loans		Advances to Monti frumentari and Agricultural Societies and Associations — Lire	Advances for agricultural improvements — Lire	Working loans		Advances to Monti frumentari and Agricultural Societies and Associations — Lire	Advances for agricultural improvements — Lire
	Direct loans — Lire	Rediscounts — Lire			Direct loans — Lire	Rediscount — Lire		
1910 . . .	4,735.00	194,481.77	98,278.25	—	229,637.40	16,060.00	500,163.56	150,263.95
1911 . . .	1,385.00	372,431.88	208,492.23	13,373.22	347,568.00	188,435.00	520,557.21	466,380,70
1912 . . .	817,50	812,361.97	181,061.71	121,575.42	382,010.30	343.636.30	506,798.22	625,196.06
1913 . . .	27.756.10	1,639,137.58	157,846.63	265,910.74	414,039.50	324,447.00	488,373.05	694,946.25
1914 . . .	72,790.15	2,597,675.05	206,790.22	307,132.65	856,814.84	368,260.30	835,822.67	747,847.27

In the tables above reproduced there are only set out the data relating to the operations conducted by the Institutions of Agricultural Credit working on the basis of the above mentioned special laws, as it is not possible to render account either of the agricultural credit operations carried on freely by ordinary commercial or cooperative societies or companies, or of the few operations made under the law of the 23rd January 1887, 4276. Finally, it is desirable to bear in mind that the figures contained in those tables do not represent all the operations of agricultural credit conducted on the basis of the various special laws, but only those performed by means of the capitals supplied by the central institutions; they therefore indicate the nature of the investment of the capitals of such institutions rather than the actual amount of the operations of agricultural credit, in order to learn which one would need information as to the number and amount of the operations done by the individual intermediate bodies with their own funds (assets and deposits).

§ 2. The organisation of land credit and the operations of the land credit institutions in the years 1910 to 1914.

Land credit is at present carried on in Italy by the following State-regulated institutions: Italian Institute of Land Credit (Rome), Istituto delle Opere Pie di San Paolo in Turin, Monte dei Paschi in Siena, Credito Fondiario Sardo in Cagliari, Savings Banks of Milan, Bologna and Verona.

By royal decree other bodies may also be authorised to carry on land credit, in particular mutual associations of landowners possessing real properties of a value not less than five millions, societies, companies and establishments with a paid-up capital of ten million, and those also with a capital below ten million but not less than two million lire, in those regions in which a local land credit body is wanting.

The Land Credits of the Savings Banks of Milan and Bologna, of the Istituto delle Opere Pie di S. Paolo, of Monte dei Paschi and the Italian Land Credit Institute may carry out operations in all the provinces of the Kingdom; the Savings Bank of Verona is authorised to carry on land credit in the Venetian provinces and in that of Mantua, and the Credito fondiario sardo, in the Island of Sardinia.

The operations, governed by precise legal enactments, which these establishments are empowered to carry on are various. The principal one consists in granting loans on first mortage, on real properties, up to one half of their value. Such loans are repayable by gradual yearly instalments in a period of not less than ten nor more than fifty years. The yearly payment comprises the instalment of redemption, the interest, the personalty tax, the equivalent of the commission charges and managing expenses, which must not exceed 45 centesimi for every hundred lire of capital borrowed; finally the instalment of repayment of the taxes due to the treasury, which is paid directly by the individual establishments for ac-

count of the borrowers. The debtor may however pay off all or part of the debt, making at the same time the said repayments and compensations to the lending establishment and the treasury.

The land credit institutions, furthermore, are empowered to acquire by transfer or subrogation, on the same conditions as the loans mortgage or secured credits and claims, making them repayable by instalments of redemption.

They obtain the necessary funds for carrying out these two classes of operations by the issue of land bonds carrying various rates of interest : 3 ½, 3 ¾, 4, 4 ½ and 5 %, for the purpose of avoiding the heavy fluctuations on the Exchange. The loans are made in land bonds at a rate of interest equal to that of the bonds issued to effect them. Such bonds are of a nominal amount of 500 lire and may be either to bearer or registered. They are redeemed gradually at par by monthly drawings of as many bonds as correspond to the instalments of the respective redemption due from the borrowers in the previous half year. The land bonds issued as a whole are guaranteed by the mortgages constituted as a whole, which safeguards the bearers of these bonds.

Landowners not in immediate need of capital, but only requiring to have it available, rather than have recourse to loans, which are made as a rule in bonds, may obtain the opening of a current account guaranteed by mortgage, in which the advances are paid in money and the rate of interest is variable and determined by the establishments.

In order now to give an idea of the work performed by the land credit establishments in Italy, we reproduce the following two tables : the first one shows, in respect to the whole of such estab ishments, the total of the principal asset and debit items for the five years 1910-1914 ; in the second is given the total of the principal operations of each institution for 1914:

TABLE II. — *Number of Land Credit Institutions and amount of principal asset and debit items for the whole of them.*

Years	Number of Establishments at the 31st December	Mortgage guarantees at 31st December — Lire	Value of the land bonds in circulation at 31st December — Lire	Amount of mortgage loans made during the year — Lire	Amount of loans existing at 31st December — Lire
	Establishments in operation				
1910	7	1,031,733,191	436,228,000	74,111,500	457,824,751
1911	7	1,152,398,533	490,198,000	78,896,000	508,276,418
1912	7	1,255,685,266	541,628,500	76,249,750	561,227,975
1913	7	1,344,855,002	580,501,500	62,846,500	601,544,503
1914	7	1,414,040,586	608,393,000	49,583,000	129,503,898

TABLE III. — *Amount of principal asset and debit items for each establishment in* 1914.

Name	Mortgage guarantees at 31st December — Lire	Value of the land bonds in circulation at 31st December — Lire	Amount of mortgage loans made during the year — Lire	Amount of loans existing at 31st December — Lire
Establishments in operation				
Land credit of the Savings Bank of Bologna	76,656,698.75	51,051,000	4,798,000	50,318,243.70
Land credit of the Savings Bank of Milan	411,174,000.00	205,887,000	19,651,000	203.411.336,43
Land credit of the Savings Bank of Verona	31,198,950.00	24,079,500	2,061,000	23,777,481.21
Credito fondiario Sardo in Cagliari	4,880,300.00	2,382,500	229,000	2,316,639,74
Italian land Credit Institute in Rome	434,194,267.00	155,923,000	10,721,000	182,173,606.76
Land Credit of the Monte dei Paschi of Siena	212,166,607.99	80,924,000	5,116,500	80,321,574.11
Land Credit of the Istituto delle Opere Pie di San Paolo of Turin	243,169,762.00	88,146,000	7,006,500	87,185,017.46

The foregoing tables bring out clearly the constant progress of the Land Credit Establishments in Italy.

Part IV: Agricultural Economy in General

AUSTRALIA.

LAND SETTLEMENT IN VICTORIA (1)

by F. E JENKINS.

INTRODUCTION.

The general system of *Land settlement* in Victoria is contained in the Land Act 1915, which provides for the disposal of the remaining Crown Lands, which are for the most part virgin country situated in the more remote and less easily accessible portions of the State. The land is principally suited for grazing, mixed farming, and fruit growing, and in the Mallee (North Western) District for wheat growing and lamb raising. The freehold of these areas may be acquired on easy terms of payment, extending over a period of either 20 or 40 years at an annual rental varying from 1 to 3d. in the £ respectively (according to the period of payment and valuation of the allotment). Any person 18 years of age may take up Crown Lands. Successful applicants receive a permit to occupy the land immediately. Residence and the fulfilment of certain improvement conditions are necessary, except where special provisions are made.

Larger areas of pastoral land may be obtained under annual grazing licence, for which an annual rental is charged according to the quality of the land and its value for grazing purposes.

The provisions for *Closer settlement* are contained in the Closer Settlement Act 1915.

(1) This article has been prepared, at the request of the Institute, by the Secretary to the Lands Purchase and Management Board of Victoria (Australia).

The initiation of the policy of closer settlement upon the land repurchased and subdivided by the State dates back only to the year 1898. The Government of that time passed an Amending Land Act of which Part IV related to the purchase by the State of privately-owned land for purposes of closer settlement. Under its provisions authority was given to acquire suitable land, each purchase being submitted to Parliament for ratification. The value of the land which could be held by a closer settlement lessee was limited to £1,000. Residence on the allotment for at least 8 months in each year, and improvements to the value of 20 % of the capital value of the land by the end of the sixth year, were compulsory conditions of the lease. At the expiration of six years from the date of the lease, and upon payment of the balance of the purchase money, the Crown Grant was issued and carried no further restrictive conditions. Power was also given under this measure to re-purchase and subdivided land suitable for the purpose of establishing homes for working men within easy distance of the scene of their employment.

In 1904 Parliament passed the first Closer Settlement Act, which placed the administration of the measure in the hands of a Board of three members, who advised the Minister in all matters of detail. This Act gave a decided impetus to closer settlement, and the Board was enabled, from the numerous properties submitted, to select and sub-divide a number of suitable Estates, which were rapidly disposed of as soon as made available.

In 1910 it was decided to extend a greater measure of financial assistance to settlers, both upon Closer Settlement areas and upon Crown Lands, and to liberalise generally the 1904 Act. Administration by a Board of three members, responsible to the Minister, was retained, but they were required to give their exclusive attention to the closer settlement policy.

Amongst many other important innovations, the Act of 1910 foreshadowed the regeneration of irrigation settlement, and wide powers were given under it for the development of farm lands coincident with closer settlement. A sum of £200,000 per annum was set aside to provide financial assistance to settlers, who desired to avail themselves of it, the security being 60 % of the value of the permanent improvements effected by the lessee, or licensee in the case of Crown Lands. The value of the land which the settler might hold under conditional purchase lease was increased to £2,500, and, in the case of a homestead area carrying extensive improvements, to £4,000. Authority was given to assist Workmen and Agricultural labourers in the erection of their dwellings and the Board was entrusted with the administration of the Wire-Netting Act, whereunder Crown tenants were enabled to obtain wire-netting upon easy terms, with a rebate where their holdings adjoined unoccupied Crown Lands. Power was also given to ratify a provisional agreement to sell and purchase land entered into by two or more private persons, if the Board was of opinion that the circumstances warranted the purchase, when the purchaser became a conditional purchase lessee under the Closer Settlement Act.

In 1912 the power to transfer working men's and agricultural labour-

ers' allotments was liberalised, the value of the land which could be held under the sections relating thereto was increased, and provision was also made for the necessities of settlers in other directions.

§ 1. The Lands Purchase and Management Board.

The scope of the Lands Purchase and Management Boards' activities is a large one. The inspection, valuation, purchase, subdivision, and settlement of repurchased lands is a preliminary only to the successful establishment of settlers. While it is expected that a new settler will work out his own salvation, the Board exercises a friendly guidance, when called on to do so, especially during the earlier years of settlement. When application for financial assistance is made, a valuation of the improvements is obtained, and no effort is spared to assist the settler and at the same time safeguard the interests of the State.

The Board is required by the Act to present an Annual Report to Parliament, in which the position of the closer settlement scheme, the amount of the advances made, the financial obligations of lessees, the receipts, and the expenditure incurred and income received, are clearly set out. These various statutory returns and the balance sheet enable the Government from year to year to acquaint the country with the actual progress or otherwise of the closer settlement policy. Whilst wide discretionary powers are vested in the Board, all matters of policy are first approved by the Minister after consultation with his colleagues in Cabinet.

Up to the present time there has been been no lack of suitable land offering for closer settlement purposes. So wide has been the choice that, except in one case, the compulsory purchase powers have not been exercised. It is customary, when an area of land is submitted at a price which will permit of subdivision into sufficiently large holdings, for the Board to recommend the Minister to obtain a preliminary report and valuation.

If the report thus obtained is generally favourable as regards the soil and other conditions, the members make a personal inspection in order to form an idea of the prospects of successful settlement in the locality. After a full consideration of the whole of the facts, if it is decided that the area can be successfully settled, further reports and valuations are obtained from two independent valuers. In the event of an unfavourable opinion being formed of the prospects of settlement, the Minister is advised to decline the offer. It is usual for the Board, upon the reports obtained, to make an offer below the vendor's price, in which case negotiations to purchase ensue, which may be terminated by the vendor refusing to resubmit at a lower figure. Should the vendor, however, accept the Board's offer, the purchase is completed and the land becomes Crown Lands under the provision of the Closer Settlement Act.

When the terms of the contract of sale do not provide for immediate possession, arrangements are made to enter upon the land to proceed with

the subdivision. The Surveyor-General of Victoria furnishes a design of subdivision, the reports and valuations having been placed at his disposal. After the preliminary design is approved and boundaries are defined, the Board fixes the price per acre of each holding based upon the total cost of the estate, including cost of purchase, survey, etc., loss of land in roads or for other purposes, and an amount to cover the cost of construction of roads, bridges, drains, and other necessary works. It is usual to consult the local municipal authorities regarding the closing of existing roads if such is required, and to obtain from the local municipal engineer an estimate of cost of road construction, before the subdivisional plan and allotment values of an estate are made public.

The Closer Settlement Act provides, that, where, after purchase of an estate, it is found necessary for the purposes of subdivision to open new roads, constructs bridges, culverts, drains, etc., the Board shall provide one-half of the total cost of such works within the boundaries of the estate, and the local municipality shall provide the remainder. If for any reason it is not convenient for a municipality to find its quota, the Board may loan them their moiety upon terms and conditions to be mutually agreed upon. In this way new settlers should not be hampered during the early days of settlement by having to cart produce over unmade roads within the estate they are residing on. In regard to road improvement outside the boundaries of an estate, settlers are in the position of other ratepayers and make their representations direct to the municipal authorities. Where two municipalities are concerned in the carrying out of public works, the Board still provides one-half of the cost and the municipalities concerned are jointly responsible for the remainder.

§ 2. Conditions for assignment of allotments.

It is the usual practice to advertise widely that allotments upon any estate are available till a given date, usually three to four weeks ahead, and all applications lodged by then are deemed to have been made simultaneously. Subdivisional plans showing the prices of all allotments, the amount of deposit, which is usually 3 % of the value of the allotment, and a brief reference to some of the principal conditions of the Act, are widely distributed. The deposit is regarded as a payment off principal, and is deducted from the capital value of the land. The instalments amounting to 3 % of the balance of the capital value, are payable every six months from the date of occupation, over a term of 31½ years. The annual payment of 6 per cent of the capital value is made up of 4 ½ per cent. interest and 1½ per cent. principal. A lessee may at any half-yearly period pay any sum off the principal. All applicants are advised to inspect the land personally before lodging an application, and to do so may obtain Railway Ticket at considerably reduced rates.

A Local Land Board is held on the date advertised, invariably in the

town nearest the estate, at which all applicants are requested to attend and give evidence in support of their applications. Each applicant is called upon to make a declaration in regard to his assets of cash, stock, plant, his experience, family responsibilities, etc. and the officer presiding over the Board makes a recommendation in accordance with the evidence submitted. Each applicant is asked to make a choice of a number of allotments, in order of preference, and, should he not be successful in his first choice, he may reasonably expect to succeed in one of his subsequent selections. An applicant is rejected if his assets or experience are not, in the opinion of the Board, sufficient to enable him to command success. Experience has shown that this method of selection is more satisfactory than a system of choice by ballot. Each applicant has an equal opportunity of securing a picked portion of an estate, if his assets warrant it, and each person applying has more than one chance to secure an allotment. Successful applicants are notified immediately after approval by the Board, and a "permit to occupy" the land granted to them is forwarded. Their liability commences from the date of the "permit." A "permit" is looked upon as an interim lease pending the issue of a conditional purchase lease at a later date.

During the first six years of the lease of a farm allotment a lessee has no power to transfer, sublet or mortgage the land, but if he desires to leave his allotment, he may, with the consent of the Board, surrender in favour of an eligible and approved person, who is willing to purchase his improvements from him and become a lessee in his stead, the new lease dating from the date of surrender.

After six years, a lessee who has complied with the conditions of his lease, may transfer his allotment and the transferee is credited with all the residence period put in by his predecessor, and may re-transfer at any time to an approved person, conditionally on his obligations to the Board being met. Any unpaid advances due by an outgoing lessee must be taken over by his successor unless otherwise arranged for.

In the case of a deceased estate, the next of kin may take out letters of administration, and they or the executors may within a period of twelve months transfer the property to an eligible person after all payments to the Board are met. In the case of an assigned estate, the assignee has power to dispose of the property within twelve months upon payment of all arrears due.

The Board has power to call on a lessee at any time to show cause why his allotment should not be forfeited if any of the covenants of the lease have not been observed. Recovery of amounts due may be made by distress warrant, or, in the event of abandonment of the allotment, by ordinary civil process. In the event of the abandonment of an allotment, the lessee forfeits any equity he may have therein, and, upon cancellation of his lease, the holding is again made available for general application. There is no accumulation of arrears of instalments loaded on a forfeited or abandoned allotment.

Personal residence by the lessee or any member of his family over the

age of eighteen years, is mandatory for a period of eight months in each year, and any breach of this condition renders the lease liable to forfeiture, Residence upon the allotment, or upon any portion of a closer settlement estate, or upon land not separated from the allotment by more than a road or water-course is deemed to be sufficient compliance. This enables several members of a family to hold allotments on the same estate, and jointly occupy one residence. It also affords opportunity for landholders adjoining the estate, who may be eligible themselves or through the members of their family, to obtain a closer settlement allotment without breaking up the family home. The most recent legislation permits an applicant for closer settlement land to nominate at the time of application some approved person to fulfil the residence condition on his behalf during the first three years of the lease. By this means a lessee is enabled to secure a holding, and cause it to be developed before he is required to comply with the residence conditions of the lease himself. After 12 years from the date of the lease the Crown Grant can be obtained on payment of the balance of the purchase money. The owner or any member of his family or any approved person, may then fulfil the residence condition.

§ 3. Advances to settlers.

Prior to 1907 settlers were unable to obtain any advances from the Board on the security of their improvements, and consequently after an unpropitious season, it was in some cases difficult for them to promptly meet their engagements to the Board. Moreover, the proper development of the land was retarded by the settlers' inability to finance at critical periods. To overcome this disability section 97 et of the Closer Settlement Act 1915, provides that an advance, up to 60 per cent of the value of the permanent improvements effected, may be made to any lessee. Section 101 extends similar assistance to the tenants of Crown Lands during the first six years of their occupancy. The maximum advance obtainable by any lessee on his improvements is £500. All advances made under this section carry 5 per cent interest and are repayable half-yearly over a term agreed upon, not exceeding twenty years, except where the advance is made for the grading of land or towards the purchase of live stock when it is repayable over a much shorter term. The Board also can suspend, say till after harvest, one or more instalments due on the land against the security of the improvements, the lessee paying five per cent for the accommodation. Permanent improvements are defined as buildings of all kinds, fencing, clearing away timber or stone, water storage, drainage, or any other improvement of a substantial character which adds to the value of the land.

The Closer Settlement Board is empowered to insure improvements on Closer Settlement allotments and Crown Lands, where it is necessary to effect such insurance.

A sum of £10,000 is provided for the Insurance Fund by the State

Treasurer, and, as the scope of the Board's Insurance widens, this undertaking will become self-supporting.

Under the Act a working man — artisan, or clerk — may obtain an allotment of land to the value of £250 and an advance of £250 for the purpose of erecting a dwelling, the lessee himself providing £50. The payments amount to 6 per cent annually on the capital value of the land over 31 ½ years ; and 8 per cent on the amount of the advance, both principal and interest being re-payable over twenty years. Lessees may either obtain designs, plans, and specifications of suitable buildings through the Board's Architect, to whom a small fee is payable, or they may submit their own plans for approval. Contracts are entered into with builders for the erection of the dwellings, after the lessee has deposited with the Board the difference between the contract price and the £250 provided. Upon all estates set aside for Workingmen's Homes the Board arranges with the local municipality to construct roads, channels and footpaths, to plant trees etc., out of the amount loaded on the estate for the purpose. Water, gas, and sewerage mains are usually arranged to be laid prior to the making of the streets, so that lessees are under no inconvenience in these necessary matters.

Provision has been made in nearly every subdivision of country lands for a number of agricultural labourers' allotments, in order that farm labourers may be encouraged to remain in close proximity to their work, and at the same time acquire homes for themselves upon easy terms. The value of the land which may be held is £350, but the amount of assistance for the erection of dwellings is limited to £50.

§ 4. Irrigable farms.

In addition to the private land which is under Irrigation, a large portion of the area dealt with under the Closer Settlement Act has been acquired specially for subdivision into Irrrigable Farms.

The State of Victoria has a larger area of land now irrigated, and a larger area supplied with water and awaiting irrigation than any other of the Australian States. The Irrigation works already completed have cost the State over £2,250,000. The channels now built or under construction will supply water to more than half a million acres. All the Irrigation Trust Works have been taken over by the State, and are now a part of the State system, and settlers have no fear of water right controversies.

The State rents to settlers grading tools at a nominal charge of $^2/_6$ per day, saving them a large expenditure on these implements. It furnishes at a nominal cost contour plans, showing the directions of the slopes, enabling the settler to tell how his land should be graded. It grades from 5 to 20 acres on about one-third of the Irrigable allotments in advance of settlement, also erects suitable houses if desired and allows extended terms for payments in each case. It charges Irrigators only enough to meet interest

and maintenance expenses and to provide a liquidation fund of 2 %, and, as this fund reduces the liabilities, the price of water will be correspondingly reduced. The price of water of course varies, but in most districts it does not exceed 7/- per acre foot.

Expert advice from the different State Departments is always at the command of settlers on all matters, relating to the adaptability of the soil, the selection and care of the stock, the handling of fruit, and the growth of cereals, etc.

The various estates have been purchased with a view to their proximity to railways, markets, and facilities for reaching the Metropolis and Seaboard. Butter Factories, Creameries, and Cool Stores are provided according to the requirements of the districts.

The Victorian System of Education is free, and provision has been made to establish Schools so that the settlers' children, even in the most remote localities, may be sure of receiving a thorough education.

In conclusion, it may be remarked that there is one factor in closer settlement, as in every undertaking in life, which counts more towards ultimate success than most others, and that is the personality of the individual.

SPAIN.

THE DISTRIBUTION OF RURAL PROPERTY AND CLOSER SETTLEMENT IN RELATION TO THE AGRARIAN PROBLEM.

(Continued).

II. — *WORKING OF PROPERTIES.*

§ 1. Land tenure.

Grave and complex indeed are the effects produced on Spanish rural life by the defective system of landed property, giving rise to distinct aspects which vie with each other in importance and in their call for an urgent solution of the agrarian problem (1).

When studying them we must nevertheless at the same time take into account another element, which, though in a way it is in turn an effect of the said land system, is, jointly with it, the cause of the present position, especially in the social aspect of the agricultural problem, no doubt the most important of all. We refer to the distinct forms of land tenure.

This question is of the utmost importance for our study, owing to the fact that the landowners cultivating their estates direct are in the minority, as we shall see later. It may be said that there hardly exist statistical data in reference to the tendency on the part of landowners to direct cultivation or leasing out. The case, nevertheless, appears to be, as is affirmed by competent persons, that as a general rule the majority of the owners of small farms cultivate the latter themselves, the contrary occurring with large landowners. It is a general fact likewise that landowners cultivate direct those farms which are in the vicinity of towns, and let out those which are remote from them.

From the scanty data in existence on the matter it appears that there are parts, such as Catalonia, in which the proportion of landowners cultivating their estates direct reaches 97 %, while in other regions that same figure indicates the proportion of leased estates. According to the entries in the registers of property, in the province of Burgos (Old Castille) the landed proprietors appear generally speaking to be direct cultivators, but there is an enormous difference between the maximum and minimum limits, as in Agreda only 10 % of the landowners devote themselves to cultivating

(1) See the first part of this study in the issue for May of the present year, pages 101-117.

their estates, while in Cervera this proportion reaches 98 %. Likewise in the region of Estramadura there is a very wide range between the limits in question : in Navalmoral more than 95 % of the farms are cultivated by their owners, but on the other hand in Trujillo they do not exceed 5 %.

It results then that in addition to the landowners and labourers, with whom we shall deal later, there is an extremely important intermediate nucleus of the rural element consisting of tenant farmers, share farmers and settlers.

The contracts which bind the man to the soil when he is not the owner of the latter vary greatly in Spain according to the provinces, and also according to the localities. Some of them date from very remote times, and hence fail to meet the needs of modern agriculture, or else they have gradually lost their original equitable character, and are very disadvantageous either to the landowners of the farmers.

The majority of the old quit-rents which still exist in Spain, have been converted from temporary into permanent, as we shall see for instance when speaking of the *foros*. A social problem which presents itself almost throughout the country, although in different degrees, consists in converting the present quit-rent holders into owners, either directly by means of the payment of a redemption fee to the owner of the estates, or by converting the quit-rents in the first place into leases or share tenures.

One of the contracts which has given rise to most agitation among the Spanish rural classes is that prevailing in Catalonia under the name of *rebassa morta*, or first vine-stocks. This contract, which is defined in article 1656 of the Civil Code, is, especially in the case of the vineyards, a species of long-date lease. Under it, the tenant (rabasser) in enchange for beneficiary possession of the estate, is bound to plant it with vine and pay the owner an annual rent in cash or in kind. As a rule the period of this contract was fifty years, or on the death of the first stocks, or on two-thirds of the vine-stocks planted remaining infertile. It gave rise to the grave agitations which took place in 1893, in which the tenants combined, forming the " Union of Rabassers ", before whose violence the landowners were under the necessity of yielding, it being stipulated in particular that the period of the contract in question could henceforward not be less than 200 years. Hence the tendency of the owners of the property in Catalonia to replace the *rebassa morta* contract by the share-farming contract.

The quit-rents in the plain of Valencia have been converted into perpetual hereditary ones, which produced an effective limitation of the owners' right. The landowner cannot allot this properties to whom he thinks fit, nor evict the farmer, nor alter in any way the conditions of renting. Nor can he refuse to recognise the successor or successors whom the farmer may present to him, as the latter has secured for himself the right of transferring the possession of the land at his will, together with the right of splitting it up into as many parcels as he likes. Any landowner attempting to rebel against this position would expose himself, together with the new farmer or tenant, to the vengeance of all the remaining tenants of the

locality, between whom close solidarity exists. The same position prevails in the fruit gardens of Murcia.

But the *rebassa morta* contracts, the *foros*, and also the quit-rents in the Eastern region, are isolated cases destined to disappear, and the importance of which, when speaking generally of the working of lands in Spain, is almost wholly of a historic character.

The most usual contract in the Spanish fields is that under which the tenant is entirely at the mercy of the landowner: namely, the short-date lease.

Short date leases are widely diffused throughout the Peninsula, and are executed on terms positively disastrous to the tenant. The rent the latter is called upon to pay for the precarious possession of the soil is generally very high. On the expiry of the contract period and the departure of the tenant from the estate he has no right to any indemnity for the improvements he may have made thereon. Such is the position of the tillers of the soil in La Mancha, Aragon, and also the eastern region, where leases for *one year* are frequent.

In Asturias, the perpetual or hereditary lease contracts formerly entered into have been gradually replaced by short date leases, the period of which is usually 4 to 6 years at most. The position however is not so grave in this region, because the majority of the tenant farmers are at the same time small owners.

In the provinces of the Centre and the South, the duration of the contracts tends constantly to diminish, the rate of rent increasing at the same time. The landowners, most of them owning large estates, make use of every means in their power with a view to raising the rent. They force the farmers, willingly or under compulsion, to break the contracts, so that they may put up the renting of their properties to auction. If a tenant with a hundred head of cattle provides a bigger rent than ten tenants with ten head of cattle each, the landowner, says Marvaud, will endeavour to have the least possible number of tenants.

In addition to the landowners, the position of tenant farmers is often aggravated by the demands of stewards or estate managers, and other intermediaries, who in their turn exploit the tenant farmer, requiring from him specified premiums, if they think that he is in somewhat easy circumstances, on pain of denouncing him to the landowner.

It really cannot be said that there is any legislation tending to lighten the wretched position of the tenant farmers. The Civil Code begins by declaring, with regard to the contract of lease, that if its duration is not stipulated, "the lease is understood to be made for the whole of the time necessary for gathering the fruits which the entire estate leased will yield in a year or can yield at one time, even though two or more years may pass before it can be obtained". With regard to the rent, the enactments of the same Code provide that the lessee shall not be entitled to any reduction thereof in case of sterility of the soil or loss of the crop owing to ordinary fortuitous circumstances. Such reduction may only be obtained if the said loss is due to extraordinary fortuitous circumstances, such as fire, war, plague, un-

usual flood, locust, earthquake, etc. The tenant will also not be entitled to a reduction of the rent if the loss of the fruits takes place after they have been separated from their root or trunk.

With regard to the improvements made on the estates, the Code enacts that the lessee shall have the same rights as the usufructuary (life-tenant) in reference to *useful and voluntary* improvements. In no case will he be entitled to any indemnity and he can only remove the improvements in question if it is possible to do so without detriment to the estate.

Another contract in fairly extensive use, above all in the Catalonian rural districts, is that of share farming. Under this contract the owner of an estate assigns definite portions of cultivable land to a share farmer for a given period, capable of extension. In return for this assignment the share farmer binds himself to deliver to the owner a variable proportion of the fruits he may obtain from the estate. This contract represents a more just and equitable form as regards the division of burdens and benefits between the landowner and the share farmer than that of simple lease. In practice, nevertheless, it has likewise encountered some drawbacks. We see in point of fact that Spanish legislation devotes to it only one article of the Civil Code, stating that the contract in question may be governed by the same provisions as the contract of partnership, by the stipulations of the contracting parties or by local customs. Thus, in default of legislative enactments, the Supreme Tribunal of Madrid has decided on various occasions that in the event of the share farmer leaving the estate before the time no legal action can be exercised against him, as occurs with other contracts. This provision naturally has called forth strong protests among the agriculturists of the region in which the share farming contract is in extensive use.

There are not wanting cases and localities in which the interests of the landowner and the cultivator in the working of the soil are in perfect harmony. The *caserias* in the Basque Provinces and the contract of *masoveria* in Catalonia, are an example of this. The Basque "*caserias*" are in reality a special form of share farming of a permanent character, and dating from time immemorial. Don Fermin Calbeton says that on an estate of his a family is settled which has been in possession of same, under the *caseria* system, since the middle of the XVIIth century. In these *caserias* the tenant, who is almost always the head of the family, bequeaths the soil to one of his sons with the obligation to improve it and pay the corresponding quit-rent. The obligations of the tenant to the landlord consist in the payment of an exceedingly modest rent in kind (two chickens, a dozen eggs), as an acknowledgment of the direct ownership of the landlord, and one half of the amount of the crops sold during the year after the needs of the tenant and his family have been satisfied. For the majority of the *caserias* there is no written contract, because, as we have said, they generally date from very old times, the cases in which either of the parties fails to carry out his obligations being exceedingly few. In the event of livestock being bred on the *caserias*, the purchase of the heads of livestock required for breeding is incumbent on the proprietor, who hands them over to the tenant, being

entitled to one half the value of the broods sold on the market. In the case of milk cattle, the tenant is bound to supply the landlord with all the milk he requires, but the latter must pay for it at the price current in the locality.

In the Catalonian *masoveria*, the *masover* or farmer lives in a part of the house usually kept by the *mas*, or owner, on the estate. He pays all the working expenses of the estate, though sometimes the owner pays a share of the cost of fertilisers, insecticides, etc.; with regard to the payment of taxes the rule is that the landlord pays the direct and the farmer the indirect taxes. The farmer engages for his account, during the entire year or at specific times, the labourers he requires. In payment for the use of the land the *masover* is bound to give the landlord a portion of the fruits he gathers, which portion fluctuates between one-half, one-third and one-fourth according to the locality and the nature of the produce.

§ 2. The "foros"

Another of the forms of land tenure in Spain are the *foros* in Galicia and Asturias, but their importance is such, owing to the effects they produce on the distribution of rural property in the said localities and the position of the rural classes there, that it becomes necessary to deal with them at some length.

When examining the process of formation in past times of the Spanish land system, we saw that the munificence of kings on the one hand and the piety of the faithful on the other, caused the accumulation in the hands of the nobles and the religious communities of enormous tracts of land (1). In consequence however of the character of the landlords, and at the same time of the system of restrictions which prevented them from alienating any part of their lands, the landlords were compelled to transfer the beneficiary possession to the people with the object of turning the land to account.

Hence arose the *foros*. These contracts were a kind of long-date lease, under which the landlords assigned all or part of their estates for lengthy periods to the cultivators in consideration of the payment of a rent stipulated in advance. The transfer was usually for three generations, or "for the life of three lords the Kings, and twenty-nine years more", according to the formula employed in the deeds of the time, and it presupposes a splitting-up of the right of property into two branches: ownership and tenure, or reversionary and beneficiary ownership. The amount of the rent paid to the *foristas* or landlords, by the *forenos* or tenants, was in general low, representing in some cases rather an acknowledgment of the overlordship than a real rent.

At the outset the institution of *foros* gave excellent results with regard to agriculture and the general position of the country, as it rendered possible the cultivation of a large amount of land and the formation of a numerous

(1) See the issue of this Review previously cited.

agricultural middle class. It must not be forgotten however that on termination of the contract the lands with all the improvements made thereon by the tenants reverted to their owners, who could let them again on the same or different terms, or dispose of them in full freedom. This precarious character of the contract under consideration was naturally the cause of constant conflicts between *forista* landlords and *forero* tenants, in which the judges held almost always to the letter of the contracts. It was then that Galician emigration, which even to-day continues in alarming proportions, had its inception. Eviction orders were frequent, in order to secure the return to the landowners, nobles or religious communities for the most part, of entire regions rendered fertile by the labour of the farmers who had to abandon them.

Under these circumstances the clamour raised by the *foreros* became such that Carlos III, after hearing the Council of Castille, promulgated in 1763 the famous *Pragmática del interin*, in which the suspension was directed of all action of reversion of the *foros* in favour of the owners of the land, until the Crown should equitably resolve in the matter. Since the promulgation of the above *Pragmática* the question has remained unsolved to the present time. Meanwhile, however, a situation has been created which is disastrous both to the cultivation of those districts and to the rural classes. Before the *Pragmática del interin*, in point of fact, the *subforos*, or sublease of the whole or part of the *foros* lands, by the *forero* tenants to third parties, were not very common, but after the above enactment, in which the right of the *foreros* to tenure of the land began to be tacitly viewed as established, the said *subforos* or subleases multiplied to an extraordinary extent, going so far as to reach a second, third, fourth degree, and even more. The result has been an incredible subdivision of the soil and a very high price of landed property. In these Cantabrian provinces there are many landed estates of 33 to 11 ares, and even 6, 4 and 2 ares. As a natural consequence of this excessive parcelling out of the land, there is likewise observed in these regions the segregation of the different plots forming the property of one and the same farmer. According to official data it is quite an ordinary thing for a landowner to have and work 40 or 50 separate plots. In the district of Santa Maria de Ordax each farmer owns 80 to 120 parcels in this form, aggregating 6 to 7 hectares, distributed over a radius of 5 kilometres. In the province of Vigo there are very many plots of 30, 20 and 10 square metres, a property with an area of 1 hectare being regarded as a big estate.

These are the properties which it has become customary in Spain to designate by the name of *minimifundios*.

§ 3. Hired labour.

Together with the large and small landowners and the tenant farmers it is necessary to consider another element in relation to the working of the soil : the wage class. This class consists, in Spain, almost exclusively of day labourers, payment otherwise than by the day being very rare in the Spanish rural districts.

If, as we have seen, the position of tenant farmers, share farmers, settlers, *foreros*, etc., is a rather sorry one, that of the day labourers, no matter what the region, is much worse.

The disorderly gatherings, riots and strikes which frequently occur in the rural districts of the South of the country, should, it would seem, draw our attention exclusively to the labourers of this region, without concerning ourselves with those of the remaining parts of Spain, where none of these agitations occur. If however we examine for a moment into the relations between the owner and the cultivators of the land is other regions, above all the Centre, the indications of no less grave a situation are observable. Let us see therefore what is the position of day labourers in the different Spanish regions.

In the provinces of the North of Spain the hired labour element is extremely small and hardly of any importance, owing to the very reduced size of the holdings in land and the system of *foros* and share farming. The farmer family is sufficient to perform the work of tilling, and at moments of difficulty such as harvesting, threshing, etc., neighbours assist each other. It may even happen that, owing to too many people being engaged in agriculture, the young men, above all at harvest time, may go to other provinces to offer their labour, returning home at the end of the summer with some savings.

The agricultural labourers of the extensive regions of the Centre may be divided into two categories, the one receiving fixed wages and the others earning a more or less permanent day wage (according to the season in which the different farming operations are carried out), or day labourers proper. In the agriculture of the two Castilles there is not the variety of produce found in the Northern valleys, but grain and vine under extensive cultivation predominate ; there is likewise no penning accommodation for livestock, turning the grass-lands to account. Therefore in these regions enforced idleness frequently deprives the day labourer of his wage. As moreover the wage which he receives when at work is so small that it does not allow him to put anything by if he wished, during the periods of idleness he is in a truly appalling position. The day labourer in Castille is in almost as bad a situation as in the Andalusian provinces, and is perhaps even more worthy of consideration owing to his resigned and long-suffering character.

The food and lodging which generally form part of the wage in these regions are defective in the extreme. In feeding the Castlian labourer the meat provided is but little, and that mostly from animals that have died a natural death, the staple articles being bread, potatoes and vegetables. The lodging provided is almost always in cellars or basements.

Among all the descriptions of labour engaged in agriculture in Spain, however, the most pitiful as regards condition is the *bracero* or day labourer of Andalusia and Estramadura. Agriculture in these provinces is characterised by all the defects of neglected large estates and lacks the advantages of cultivation on a large scale. Although it cannot be said that all the property in these regions is concentrated in few hands, it is certain that both large and small estate owners do not concern themselves.

TABLE I. — *Rates of day wage for*

	Spring			
	Usual wage	Maximum wage	Minimum wage	Usua wage
Alava	2.36	4.00	1.25	3.
Albacete	1.77	2.50	1.50	2.
Alicante	1.59	2.25	1.25	2.
Almeria	1.81	2.00	1.25	2.
Avila	1.74	2.75	1.00	2.
Badajoz	1.42	3.00	0.75	2.
Baleares	2.14	3.25	0.50	2.
Barcelona	2.67	3.50	2.00	3.
Burgos	2.22	4.25	1.00	3.
Caceres	1.42	2.50	1.00	2.
Cadiz	1.71	2.50	0.75	2.
Canaries	1.68	2.00	1.00	1.
Castellon	1.60	2.50	1.25	1.
Ciudad Real	1.77	3.00	1.25	2.
Cordova	1.62	2.25	1.25	2.
Corunna	2.10	3.00	1.75	2.
Cuenca	4.58	2.00	1.00	2.
Gerona	2.68	3.50	2.00	3.
Granada	1.51	2.50	1.00	1.
Guadalajara	1.21	2.50	1.00	2.
Guipuzcoa	2.75	4.00	2.00	3.
Huelva	1.94	2.50	1.50	2.
Huesca	2.23	4.00	1.25	3.
Jaen	1.56	2.00	1.25	2.
Leon	1.86	4.00	1.00	2.
Lerida	2.35	3.00	1.50	3.
Logroño	2.06	3.00	1.25	2.
Lugo	2.15	3.25	1.50	2.
Madrid	2.09	4.00	1.25	2.
Malaga	1.68	4.00	1.10	2.
Murcia	1.64	3.25	1.25	2.
Navarre	2.57	4.00	1.50	3
Orense	2.07	3.00	1.00	2.
Oviedo	2.50	4.00	1.75	2.
Palencia	1,88	4.00	1.25	2.
Pontevedra	2.12	2.50	1.75	2.
Salamanca	1.81	3.00	1.00	2.
Santander	2.17	3.00	1.25	2.
Segovia	1.69	2.50	1.00	2.
Seville	2.00	3.00	1.25	2.
Soria	1.56	2.25	1.00	2.
Tarragona	2.01	2.25	1.00	2.
Teruel	1.77	3.00	0.75	2.
Toledo	1.45	3.00	1.25	2.
Valencia	2.50	2.50	1.25	2.
Valladolid	1.75	2.50	1.00	2.
Biscay	2.75	4.00	2.00	3.
Zamora	1.38	2.50	0.75	3.
Saragossa	2.02	4.75	1.00	3.
Average for Spain	1.93	4.75	0.75	2.

ɔnding to seasons and provinces.

mmer		Autumn			Winter			Annual
aximum wage	Minimum wage	Usual wage	Maximum wage	Minimum wage	Usual wage	Maximum wage	Minimum wage	average.
4.50	1.50	2.85	4.50	1.50	2.36	4.00	1.25	2.65
3.75	1.50	1.91	2.50	1.25	1.70	2.25	1.25	2.02
4.25	1.25	1.99	4.00	1.25	1.66	3.00	1.00	1.84
3.50	1.50	1.81	3.50	1.50	1.57	2.00	1.25	1.80
5.00	1.25	2.09	4.50	1.00	1.59	2.75	1.00	2.02
4.50	1.00	1.67	3.50	0.75	1.33	3.00	1.00	1.80
4.50	1.75	2.07	2.75	1.50	1.95	3.25	1.25	2.14
6.50	2.25	2.80	5.00	2.25	2.63	3.50	1.50	2.80
5.75	1.25	2.02	3.75	1.00	1.89	3.00	1.00	2.31
4.25	1.00	1.33	2.50	1.00	1.21	2.25	1.00	1.51
3.00	1.50	1.83	2.00	1.50	1.52	2.00	1.25	1.84
3.50	1.25	1.86	3.75	1.25	1.69	2.00	1.00	1.79
3.00	1.25	1.65	3.50	1.25	1.48	2.00	1.00	1.65
3.50	1.50	1.65	2.00	1.25	1.54	2.00	1.25	1.86
4.00	1.50	1.65	2.75	1.10	1.71	2.50	1.25	1.84
5.00	1.25	1.96	2.50	1.75	1.75	2.00	1.50	2.02
4.50	1.25	1.71	2.50	1.25	1.64	2.00	1.25	1.83
6.00	2.00	2.57	2.50	2.00	2.41	3.00	2.00	2.69
3.50	1.25	1.45	2.00	1.00	1.43	2.00	1.00	1.58
6.00	1.25	1.47	2.75	1.00	1.35	2.25	1.00	1.74
4.50	2.00	2.66	3.50	2.00	2.42	3.50	1.50	2.75
4.00	1.75	1.80	2.50	1.25	1.80	2.50	1.25	2.00
6.50	1.25	2.15	3.50	1.00	2.05	3.50	1.00	2.44
3.50	1.40	1.75	2.75	1.00	1.56	2.00	1.25	1.83
5.00	1.40	1.75	3.75	1.00	1.66	2.75	1.00	1.96
6.00	2.00	2.21	3.00	1.25	1.85	3.00	1.25	2.41
6.09	1.50	1.71	3.00	1.00	1.66	3.00	1.00	2.07
4.00	1.50	2.03	4.00	1.50	2.01	3.00	1.00	2.11
5.25	1.50	1.91	3.25	1.25	1.85	3.25	1.25	2.12
4.00	1.25	1.66	2.25	1.20	1.69	2.50	1.12	1.77
3.00	1.50	1.70	2.50	1.40	1.60	2.00	1.40	1.79
7.00	1.75	2.29	4.50	1.50	2.14	4.00	1.00	2.54
4.50	1.50	2.21	4.00	1.50	1.78	2.50	0.75	2.12
4.00	1.75	2.55	4.00	1.50	2.32	3.00	1.50	2.55
5.00	1.25	1.61	2.75	1.00	1.48	2.75	1.00	1.78
5.00	1.00	2.00	2.00	2.00	1.48	2.00	1.00	2.01
5.00	1.25	1.88	3.25	1.00	1.70	3.00	0.75	2.08
4.00	2.00	2.42	3.50	1.50	2.28	3.00	1.50	2.38
4.00	1.00	1.65	3.00	1.00	1.47	3.00	0.75	1.85
4.00	1.75	2.00	3.00	1.25	1.77	2.50	1.25	2.17
5.25	1.50	1.53	2.25	1.00	1.44	2.00	1.00	1.77
3.50	1.50	2.03	3.00	1.00	1.86	2.50	1.00	2.03
6.00	1.00	1.72	3.50	0.75	1.58	3.00	0.75	1.92
5.00	1.50	1.59	3.00	1.00	1.57	3.50	1.00	1.84
4.00	1.00	1.75	2.00	1.25	1.62	2.50	0.75	1.98
4.00	1.00	1.76	2.50	1.50	1.36	2.00	1.00	1.85
4.50	2.50	2.75	3.50	1.50	2.16	2.50	1.50	2.66
4.00	1.25	1.50	2.50	1.00	1.25	2.00	0.75	1.82
6.50	1.00	2.08	5.00	1.00	1.91	4.50	0.75	2.36
7.00	1.00	1.93	5.00	1.00	1.74	4.50	0.75	2.05

TABLE II. — *Rates of day wages*

	Spring			
	Usual wage	Maximum wage	Minimum wage	Usual wage
Alava	1.77	3.00	1.00	2.4
Albacete	0.99	1.50	0.70	1.4
Alicante	0.90	2.00	0.50	1.3
Almería	0.79	1.50	0.50	1.5
Avila	0.95	1.75	0.50	1.0
Badajoz	0.75	1.80	0.50	1.0
Baleares	1.05	1.50	0.75	1.1
Barcelona	1.45	2.00	0.50	1.5
Burgos	1.54	3.25	0.50	1.9
Cáceres	0.71	1.75	0.40	0.8
Cadix,	—	—	—	1.3
Canaries	0.99	1.25	0.60	1.0
Castellón	0.85	2.50	0.50	1.0
Ciudad Real	0.90	1.50	0.50	1.1
Cordova	0.91	1.50	0.35	1.1
Corunna	0.70	1.25	0.40	1.2
Cuenca	0.72	1.50	0.25	1.1
Gerona	1.33	1.50	0.50	1.4
Granada	0.78	1.50	0.50	0.9
Guadalajara	0.85	1.50	0.37	1.3
Guipúzcoa	1.72	3.00	1.00	1.7
Huelva	0.99	1.15	0.75	1.2
Huesca	1.42	2.00	0.75	1.7
Jaén	0.87	1.25	0.50	1.0
Léon	1.29	2.50	0.50	1.9
Lérida	1.28	2.25	0.75	1.5
Logroño	1.06	1.50	0.75	1.2
Lugo	1.47	2.50	0.75	1.5
Madrid	1.06	1.75	0.75	1.1
Malaga	0.93	1.50	0.50	0.7
Murcia	0.88	1.25	0.62	1.0
Navarre	1.54	3.00	0.75	1.7
Orense	1.32	2.50	0.50	1.3
Oviedo	1.44	2.25	1.00	1.5
Palencia	1.02	2.00	0.50	1.8
Pontevedra	1.43	1.50	1.25	1.4
Salamanca	1.10	2.25	0.50	1.8
Santander	1.28	1.50	1.00	1.5
Segovia	0.89	2.00	0.50	1.6
Seville	1.02	2.00	0.75	1.1
Soria	1.06	3.25	0.50	1.5
Tarragona	1.03	1.50	0.50	1.2
Teruel	0.99	2.00	0.40	3.0
Toledo	0.79	1.25	0.50	1.2
Valencia	1.04	1.25	0.50	1.0
Valladolid	1.00	1.00	1.00	1.3
Biscay	1.70	2.50	1.00	2.0
Zamora	0.75	1.00	0.50	1.5
Saragossa	1.01	2.00	0.50	1.5
Spain	1.11	3.25	0.25	1.4

nen according to seasons and provinces.

mmer		Autumn			Winter			Annual
ximum wage	Minimum wage	Usual wage	Maximum wage	Minimum wage	Usual wage	Maximum wage	Minimum wage	average
3.50	1.20	2.19	3.50	1.20	1.80	3.00	1.00	2.04
2.50	0.90	1.00	1.50	0.63	0.99	1.50	0.50	1.11
2.00	0.75	0.97	1.50	0.60	0.85	1.00	0.60	1.01
2.00	0.50	1.14	2.00	0.50	0 80	1·50	0.50	1.07
2.25	0.50	1.01	1.50	0.50	0.83	1.50	0.50	0.96
2.00	0.50	0.74	1.50	0.50	0.71	1.50	0.50	0.80
1.50	0.70	1.05	1.50	0.75	1.00	1 50	0.50	1.06
2.50	0.50	1.41	2.00	0.50	1.40	2.00	0.50	1.45
3.75	1.00	1.50	2.25	0.75	1.27	2.75	0.75	1.57
2.25	0.50	0.65	1.00	0.50	0.58	1.25	0.50	0.77
2.00	1.00	—	—	—	0.91	1.50	0.50	1.12
1.75	0.80	1.01	1.25	0.60	0.98	1.25	0.60	1.01
2.50	0.50	0.79	1.25	0.50	0.72	1.00	0.50	0.84
2.00	0.75	0.90	1.25	0.50	0.80	1.00	0.50	0.93
2.00	0.75	0.89	1.50	0.60	0.88	1.50	0.60	0.94
2.50	0.50	0.86	2.00	0.50	0.73	1.50	0.50	0.89
2.00	0.25	0.70	1.50	0.25	0.73	1.50	0.25	0.81
2.00	0.50	1.28	2.00	1.00	1.05	1.50	0.50	1.28
2.25	0.50	0.84	1.50	0.50	0.89	1.50	0.40	0.87
3.75	0.50	0.79	1.75	0.37	1.23	1.50	0.45	1.05
3.00	1.00	1.71	3.00	1.00	1.65	3.00	1.00	1.71
2.25	1.00	0.97	1.25	0.60	0.95	1.25	0.75	1.05
3.00	0.75	1.27	2.00	0.75	1·25	2.25	0.75	1.41
2.00	0.70	0.92	1.50	0.50	0.80	1.25	0.50	0.93
4.00	1.25	1.30	3.25	0.50	1.22	2.50	0.50	1.44
2.50	0.75	1.15	1.50	0.75	1.10	1.50	0.70	1.25
3.00	0.75	0.87	1.25	0.75	0.85	1.25	0.50	1.01
2.50	0.75	1.37	2.50	0.40	1.37	2.50	0.40	1.44
1.75	0.75	1.00	1.75	0.75	0.98	1.50	0.75	1.05
2.00	0.50	0.86	1.75	0.50	0.71	1.25	0.50	0.86
1.25	0.75	0.92	1.25	0.75	0.84	1.25	0.62	0.92
3.00	1.00	1.30	2.75	0.75	1.42	2.75	1.75	1.49
2.25	1.00	1.21	1.75	0.75	1.10	1.50	0.68	1.25
3.00	1.00	1.43	2.25	1.00	1.30	2.25	0.75	1.41
3.00	0.75	1.24	2.25	0.60	1.02	2.00	0.50	1.27
2.00	0.50	—	—	—	0.95	1.40	0.50	1.28
3.50	0.75	1.16	2.50	0.50	1.02	2.25	0.50	1.27
2.50	1.25	1.87	2.50	1.25	1.20	1.75	0.75	1.47
2.50	0.50	2.19	1.25	0.50	0.79	1.25	0.50	1.02
2.00	0.87	0.97	1.00	0.87	0.90	1.13	0.75	1.01
2.50	1.00	0.70	1.12	0.50	0.75	1.00	0.50	1.00
2.00	0.50	1.19	1.50	0.50	1.01	1.59	0.50	1.09
2.50	0.50	1.00	2.00	0.50	0.80	2.00	0.50	1.02
2.50	0.70	0.71	2.00	0.50	0.67	2.00	0.50	0.85
2.00	0.50	0.96	1.50	0.50	0.84	1.50	0.50	0.96
2.75	0.75	1.00	1.00	1.00	0.69	1.00	0.50	1.01
2.50	1.00	1.70	2.50	1.50	1.50	2.50	1.00	1.45
3.00	0.80	0.68	1.00	0.50	0.67	1.00	0.50	0.91
4.00	0.50	1.02	2.00	0.50	1.00	2.00	0.50	1.14
4.00	0.25	1.08	3.50	0.25	0.99	3.00	0.25	1.14

with their estates except to extract the biggest possible rent from the tenant farmers. The result is that those individuals who are placed between the day labourers and the owners of the land think in their turn of getting the most out of the properties rented. During the continuance of the contracts they endeavour to limit their expenses as much as they can by paying the lowest possible wage, and on its expiry they abandon the farm, leaving large numbers of day labourers without employment.

In the Andalusian farmyards it is usual to appropriate a dwelling, and none of the best, for lodging the day labourers ; this dwelling is known by the name of *ganania*, The labourers crowd into it on leaving work in order to repose on a cloak spread on the ground, or to eat. The food consists of two or three *gazpachos* per day, consisting of boiled black bread, oil and vinegar, all cold. The meat, which they rarely get, is from animals that have died naturally.

Below we give some fairly complete and accurate data in relation to the rate of day wages received by agricultural labourers in the Spanish provinces, compiled in the year 1914 by the Institute of Social Reforms of Madrid.

It must be pointed out that in some regions the wage is paid in cash exclusively, in others wholly in kind, and in the majority partly in cash and partly in kind. In addition there are villages in which payment is by area, and others in which the labourers are paid according to the quantity of produce. Taking into account these variations, with the object of furnishing uniform data in the foregoing tables, the day wage has been put down in pesetas, reducing to cash the value of the food and articles supplied to the day labourers as part payment for their work, and there has likewise been calculated the daily average of the remuneration of those who are paid according to area or quantity of produce.

Allowing for the variation of wages during the year, the average wage for each season, and finally that for the year, has been indicated. The word *season* has a different meaning in each region of Spain. Thus, for instance, in some villages it is usually said that the summer only lasts forty days, which is the time of harvesting. In order to calculate the averages of these localities, nevertheless, the astronomic season has also been taken into account.

GREAT BRITAIN AND IRELAND.

THE WORKING OF THE SMALL HOLDINGS AND ALLOTMENTS ACT - 1908.

SOURCES:

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INTRODUCTION.

In the Bulletin for March, 1911, we gave an account of the legislation enacted in England and Wales for the provision of small holdings and allotments, culminating in the 1908 act, which was amended in 1910 so as to provide compensation to tenants on whom notice to quit is served with a view to the use of the land for the provision of small holdings under the 1908 Act.

In that article we gave data on the working of the Act up to the close of 1909; we shall now bring the information up to date, summarising the reports issued by the Land Division of the Board of Agriculture and Fisheries for the years 1910, 1911, 1912, 1913 and 1914, this latter being the latest published.

§ 1. The working of the Act.

Since the Act came into operation in January 1908 the amount of land acquired or agreed to be acquired by the County Councils and Councils of County Boroughs for small agricultural holdings, is stated as follows:

Year	No. of acres acquired
1908	21,417
1909	39,472
1910	33,335
1911	36,358
1912	33,493
1913	24,493
1914	16,537

It will be observed that the largest quantity of land was acquired in 1909, and that since then there has been a continuous decline, except in 1911, when the staff of the Land Division of the Board of Agriculture was reorganised and the number of Small Holdings Commissioners was increased with a view to assisting County Councils in their work of satisfying the demand for small holdings.

The Board of Agriculture attributes this continuous decline mainly to the fact that in the earlier years the Councils were occupied in acquiring land for those applicants whose needs were most easy to satisfy, and that subsequently they had to deal with the more difficult applications of men whose requirements can only be met by the acquisition of land in close proximity to their present homes.

The great reduction in the number of acres acquired in 1914 as compared to 1913 (nearly 8000 acres less) is due entirely to the war. Early in August 1914 the Board informed Councils that no more land should be acquired by purchase in view of the necessity of husbanding the financial resources of the country, and the quantity acquired represents only transactions entered into during the first 7 months of the year.

Up to 31st December, 1914, 195,499 acres had been acquired or agreed to be acquired for small holdings by County Councils in England and Wales, of which 138,405 acres were purchased for £4,549,068 and 57,094 acres leased for rents amounting to £71,221 a year. The Councils of County Boroughs acquired 2,607 acres, of which 1,073 acres were purchased for £52,624 and 1,534 acres leased for rents amounting to £2,395 a year. In addition, the Board of Agriculture, acting in default of the Bournemouth Borough Council, leased 182 acres at rents amounting to £370 a year. The total quantity of land acquired under the Act is therefore 198,288 acres.

Of this land 178,911 acres were let by County Councils to 12,584 individual small-holders, 506 acres were sold to 50 small-holders, and Councils

of County Boroughs let 1,259 acres to 218 individual tenants. Besides this 8,436 acres were let to 63 cooperative small-holdings associations, who sublet the land to 1,451 of their membres, and 3,580 applicants have been provided with 47,500 acres by private landowners direct.

At the end of 1914 the land acquired under the Act and not yet assigned in small holdings amounted to 9,963 acres, which it was estimated would provide for about 525 applicants. The Act has thus resulted in the provision of small holdings for 18,486 applicants in seven years.

The proportion of applicants who express any desire to purchase their holdings, rather than rent them from the Councils, has always been inconsiderable and shows no signs of increasing, the percentage remaining at less than 2 per cent.

The average price of land purchased since the Act came into operation is £32.17s. and the average rent of the land leased £1.5s. per acre. In 1914 the average price of the land purchased was £36 an acre and the average rent of the land £1.5s. 6d.

Since the Act came into operation 41 Councils have acquired over 2,000 acres, 15 Councils over 4,000 acres, and seven Councils over 6,000 acres. The Counties of Lincolnshire and Norfolkshire are those in which there is the greatest demand for small holdings, and experience shows that in those districts the demand is practically unlimited, exceeding considerably the supply available to the Councils. Westmoreland, Middlesex, West Sussex, and Radnor are the Counties in which the demand is smallest.

The following statement shows the number of Orders for the compulsory acquisition of land made by the Councils since the Act came into force:

Year	Number	Acreage
1908	16	2,424
1909	161	10,982
1910	109	7,022
1911	75	5,487
1912	75	5,871
1913	31	2,269
1914	24	1,533
	491	35,588

The Report attributes the decrease in the number of these Orders for 1914 entirely to the war.

The average size of the holdings provided is 13 acres in England and 30 acres in Wales, the higher average in Wales being due to the poorer quality of the soil.

The following table has been drawn up by the Board of Agriculture for 1914.

Countries	Total acreage under crops and grass	Acreage of holdings above 1 acre and not exceeding 50 acres	% of total acreage	Acreage acquired by the County Councils for small holdings	% of total acreage	% of acreage of 1-50 acre holdings
England	24,367,509	3,582,536	14.7	169,813	0.7	4.7
Wales	2,746,495	703,528	25.6	25,686	0.9	3.7
Total England and Wales .	27,114,004	4,286,064	15.8	195,499	0.7	4.6

This table shows that in England nearly 15 per cent of the cultivated land is held in small holdings, while in Wales the proportion is over 25 per cent. The total quantity of land acquired under the Act in England and Wales is less than 1 per cent. of the whole cultivated area, and it represents about 4 ½ per cent. of the total area in small holdings. Twenty per cent. of the holdings provided had dwelling houses upon them.

Condition of the Holdings.

The annual returns made to the Board by the Councils show that in the great majority of cases the rents of their small holdings are paid punctually and that the tenants are cultivating their land satisfactorily. The number of tenants who gave up their holdings at their own request in 1914 was 253 in England and 13 in Wales, and in many cases the reason was that they had prospered sufficiently to enable them to take larger holdings. Councils gave notice to quit to 86 tenants in England and 2 in Wales, figures which indicate that the number of tenants who proved unsatisfactory was less than 1 per cent.

A special enquiry conducted by the Small Holdings Commissioners showed that out of a total of 428 holdings investigated, the conditions of 339 were good, 55 fair, and 34 bad. The great majority of the schemes drawn up by the Board for the development of small holdings are working satisfactorily and the land has been improved substantially since its acquisition by the Councils. The report states that the arrears of rent outstanding at the end of 1914 represent a very small proportion of the total rental of the Councils concerned.

One of the problems which the administrators of the Act have had to face has been that of providing adequate equipment for small holdings within the limit of the expenditure which the small holder could reasonably afford to pay. In the early years of the Act the need for strict economy was not always duly observed, and this led to the appointment in 1912 of a Departmental Committee to inquire and report into the nature and character of the buildings which should be provided for use on small hold-

ings. The Committee in its report submitted eleven designs of suitable houses, the cost of which, calculated at 4d. per cubic foot, varies from £183 to £268, together with plans of farm buildings of brick and of timber for holdings of various descriptions and sizes. Wide publicity was given to this Report, published in 1913.

As one of the main purposes of agricultural legislation in England is the improvement of the conditions of the agricultural labourer it is interesting to note that in 1909 twenty-five per cent. of the applicants for small holdings were agricultural labourers, in 1910 thirty per cent., in 1911 twenty-eight per cent., in 1912 twenty-nine per cent., in 1913 twenty-four per cent., and in 1914 thirty-two per cent. These figures show that the percentage of labourers who benefit by the Act is low; the majority of the applicants for small holdings are either men who already have small areas of land and want more, or men who have some business of their own which does not occupy the whole of their time. In the majority of cases, an agricultural labourer in regular work has neither the time nor the capital to cultivate a small holding, and the needs of men of this class are more suitably met by the provision of small allotments which they can cultivate in their spare time.

§ 2. Advances to sitting tenants.

Under section 19 of the Act, County Councils are empowered to advance money to sitting tenants of small holdings to enable them to purchase their holdings. The loans may not exceed four-fifths of the purchase price, and they are repayable within a period not exceeding 50 years. During the seven years in which the Act had been in operation when the Report for 1914 was published, the number of tenants who had been assisted to purchase their holdings under this section was 125 and the total sum advanced £69,031.

The following statement shows the number and amount of the advances made during 1914:

County	No. of Tenants	Amount of loans. £
Lancaster	3	1,590
Middlesex	1	160
Wilts	2	1,496
Yorks (West Riding)	1	1,320
Anglesea	5	4,696
Carmarthen	3	1,430
Denbigh	7	3,070
Flint	2	1,440
Montgomery	6	2,638
Pembroke	2	1,424
	32	19,264

Of the 32 tenants thus assisted to purchase their holdings 25 were in Wales.

§ 3. The unsatisfied demand.

During the seven years from 1908 to 1914 applications for small holdings were made to the Councils by 46,660 individuals, and 96 associations, and the total quantity applied for amounted to 782,286 acres. Of the individual applicants about one half, 27,667, were provisionally approved as suitable, and of these 18,486 have obtained holdings.

At the end of 1913 the number of approved applicants on the books of County Councils who still remained to be satisfied was 6,271 and one association, the acreage necessary to satisfy their requirements being 91,478 acres. During 1914 the Councils acquired or agreed to acquire 16,537 acres towards satisfying the demand, and in addition 266 applicants were, to the knowledge of Councils, satisfied privately with 3,500 acres.

The unsatisfied demand was probably further reduced by applicants withdrawing for various reasons, and by the fact that the land acquired and not allotted at the end of 1913 provided in some cases for a larger number of approved applicants than had been estimated.

During 1914 the Councils received additional applications from 3,376 individuals and 7 associations for 58,789 acres, of which they approved provisionally 2,100 individuals and 5 associations for 30,493 acres, and the position at the end of 1914 was that there were 6,432 applicants and 2 associations approved as suitable for whom land had not been acquired and that 89,251 acres were required to satisfy them.

The Holland Division of Lincolnshire, where there are 759 unsatisfied approved applicants requiring 13,518 acres, still remains the County with the largest unsatisfied demand, while Cambridge with 679 applicants for 5,776 acres, Somerset with 426 applicants for 5,453 acres and Norfolk with 379 applicants for 5,334 acres are each faced with a large demand.

In spite of the fact that the war prevented the purchase of any land during the last five months of 1914, the extent of the unsatisfied demand at the end of that year was less than it had been at any time since the Act came into operation.

§ 4. Land renting associations.

Under the Act the Councils are empowered to let land to co-operative associations formed for the purpose of creating or promoting the creation of small holdings, and so constituted that the division of profits among their members is either prohibited or restricted. It had been hoped that this provision would result in the formation of a number of small holdings colonies on a co-operative basis, whose members would organise for the co-operative

purchase of their requirements and for the co-operative sale of their produce. The policy of letting land to such Land Renting Associations was strongly advocated in the Report of the Board for 1909 which stated: "This method relieves the Council from the whole of the work involved in the sub-division of the land and the selection and supervision of the tenants and it secures the best possible form of local control". On these grounds, and in consideration of the fact that the rent would be paid in one sum by the Association instead of having to be collected from a number of tenants, it was anticipated that the Councils would be able to let the land to such Associations at lower rents than those charged to individual small holders. Consequently, in the administration of the Act, care was taken to encourage Land Renting Associations as far as possible.

The following statement shows the number of associations to which land was let during the five years from 1910 to 1914 inclusive:

Year	No. of Associations	No. of tenants under Association	Area let
1910	13	271	1,196
1911	13	242	1,073
1912	16	235	1,497
1913	13	169	1,371
1914	7	63	447

The Report for 1913 had, however, to admit that the results of the experiment, after six years experience, had been distinctly disappointing. At the end of 1913, 8,028 acres had been let to 61 associations, the number of occupying tenants being 1,424. But, with few exceptions, the associations had been quite unsuccessful in promoting co-operative methods among their members. Out of 60 associations visited by the inspectors of the Board, only fifteen had taken steps to organise co-operative trading. Seven societies owned certain agricultural implements available for the joint use of their members, while four societies had started credit banks, one of which was being wound up in 1913 owing to difficulty in securing the repayment of the loans made. Only nine of the associations were affiliated to the Industrial Co-operative Societies, and even in these cases there was little interchange of trade. In most cases, too, the management of the lands by these associations has been unsatisfactory. With one exception, the supervision of the tenants has been entrusted to the Committee and Secretary of the association, all persons devoid of training or experience in estate management. Again, although most of the Councils had let the land to these associations at rents from 2½ to 5 per cent. lower than those charged to individual tenants, yet the associations themselves charged such increased rents to cover their expenses that in the majority of cases the tenants were not so well off as they would have been if they had held the land directly from the Councils. The number of new tenants provided with land under Land Renting Associations during 1913 was 169; in 1914 the number declined to 63.

§ 5. Education and organisation.

The Reports point out that as a result of the Act most County Councils have now become large landlords, and that it is their duty not only to make sure by systematic and periodical inspection that their tenants are cultivating the land properly and that the buildings are sufficient and kept in adequate repair, but that they should also make it their business to see that their small holders obtain the full advantage of the educational facilities and advice now available for them. Enquiries show that it is only in a small minority of cases that small holders avail themselves of the assistance and advice of the County agricultural organisers and instructors, and the Board urges on the Councils the need of linking up the work of the Agricultural Education Committees with that of the Small Holdings Committees.

The policy of encouraging small holdings must depend for its ultimate success on an increase in the yield and profits obtained from the land. So long as small farmers are content to copy the methods of cultivation adopted by large farmers they cannot hope to make a satisfactory living. But the adoption by small holders of new methods of intensive cultivation, and of the best means of marketing their produce, can only be secured by education and organisation. Convinced of this, one of the first steps taken by the Board in administering the Act, was to make an application to the Development Commissioners for a grant of £20,000 a year with which to make grants to County Councils to enable them to appoint organisers to advise small holders in the County as to the best methods of purchasing their requirements and marketing their produce, and to form them into co-operative societies. With the same end in view the Board agreed in 1908, with the consent of the Treasury, to make a grant of £1,200 a year for three years to the Agricultural Organisation Society, so as to enable it to appoint organisers and take other measures to promote co-operation in connection with the cultivation of small holdings and allotments. This grant was increased in 1913 to a sum varying between a minimum of £6,000 and a maximum of £11,000, the actual amount to be determined by the Society's subscription income. As a result of these efforts some progress has been made and the Board is able to report that on 31st March, 1913, the number of societies affiliated to the Agricultural Organisation Society was 478, of which 190 were Small Holdings and Allotment Societies. The Report published by the Agricultural Organisation Society for 1914 shows that on March 31st of that year the number of affiliated societies had increased to 539 of which 195 were Small Holding and Allotment Societies.

The Outlook.

In conclusion, the Report for 1914 states that owing to the financial situation produced by the war, it will be impossible for the Councils to do much at present in the direction of acquiring additional land under the Act,

but the Board urges the Councils not to miss any opportunity of acquiring suitable land on lease. It is also pointed out that the reduction in the work involved in the acquisition of land will afford an opportunity for the Councils to consider carefully improvements in the administration of their properties, and steps to assist their tenants to make the best use of their land. With this end in view, the Board itself has taken the initiative in arranging for local conferences between the Small Holdings Commissioners, the Inspectors for Agricultural Education, the County Land Agents, the County Organisers, and the Live Stock Officers, believing that such conferences will lead small holders to avail themselves more freely of the advantages open to them in the direction of scientific instruction and expert advice, which alone can insure the high productivity required to enable them to conduct their farms on a profitable basis.

§ 6. Allotments.

On the 31st December 1914, the total area of land let for allotments by the various Local Authorities in England and Wales who sent in returns to the Board of Agriculture (7,638 out of a total of 8,300) was 33,523 acres, of which 8,556 acres were the property of the Councils and 24,967 acres were leased. This land is let to 130,526 individual tenants, and 52 Associations.

During 1914 applications were received for allotments from 12,731 individuals and 2 associations, as compared to 14,897 individuals and six associations in 1913. The returns show that 832 acres were acquired for allotments during 1914 as compared with 1,395 acres in 1913, the reduction being due in a large measure to the fact that, in view of the war, the Public Works Loan Commissioners, who usually finance such transactions from the funds at their disposal, decided for the present to make no further grants for this purpose.

The average price of the land purchased in 1914 was £88 an acre and the average rent of land leased £2.2.4 an acre.

The returns received by the Board of Agriculture show an unsatisfied demand for allotments from 8,391 individual applicants and two associations, and the quantity of land required to satisfy them is 2,949 acres, figures which are said to be smaller than they had been at any other time since the Small Holdings and Allotments Act came into operation.

BRIEF ANALYSES OF SOME OF THE MOST RECENT PUBLICATIONS ON AGRARIAN ECONOMY IN GENERAL

INTERNATIONAL STUDIES.

TARUFFI Prof. DINO: I concetti informatori del colonizzamento agricolo (*Guiding Bases of Agricultural Settlement*). The systems followed in the principal European and non-European countries with emigrants of white race. Florence, Istituto agricolo coloniale italiano, 1915, pp. 268.

In the first part of the above-named volume, the author studies land settlement in some non-European countries, namely, the United States of America, Canada, Argentina, Brazil, Australasia, Algeria, Tunisia, Libya, Eritrea and Benadir, taking due account of the rights of the natives in the lands to be settled.

The second part, which is prefaced by a study on the two different systems of settlement, direct and indirect, on indirect measures for promoting settlement, on the release of lands from servitudes and easements, and on the restriping and consolidation of lands, is devoted to European settlement, namely to Russia (agrarian reform), Siberia, Finland, Germany (Prussia), Scandinavia, England, Ireland (agrarian reform), Spain and Italy. As regards Prussia, a distinction is made between State Settlement (Land settlement Commission for the provinces of West Prussia and Posen) and free settlement (general Prussian Commissions — the "Rentengüter"); in respect of land settlement in Italy there are examined (*a*) the schemes of general settlement and (*b*) the schemes and laws for land settlement by regions.

In the third part the author confines himself to critical considerations on the following subjects: the course of land settlement in new countries, analysis of the varied forms of concession, considerations on farm property in the new countries, methods and forms of land settlement in European countries, analysis of methods of home settlement: State settlement and free settlement assisted by credit, means for keeping the small holdings secured.

In the last pages of the interesting volume a few problems are examined relating to land settlement in Italy, reference being made in particular to the South of Italy with regard to land settlement, and the best mode of carrying settlement into effect in Italy.

The publication in question, which is well-stocked with agricultural and personal considerations with reference to the problems of land settlement, will be found exceedingly useful to all those who concern themselves with these subjects, both by reason of the abundant material drawn from numerous publications and the faithful summary of the different methods used in the several countries, which likewise renders this book a useful volume for reference.

DENMARK.

FARM WAGES IN 1915. — Tyende-og daglejerlønnen i landbruget 1915. Udgivet af det statistiske departement. Danmarks statistik. Statistical Communications. Series 4, Vol. 51, Part 2, 50 pages. Copenhagen, Bianco Lunos Bogtrykkeri, 1916.

In the autumn of 1915, the Statistical Department of Denmark undertook an enquiry into agricultural wages. Agricultural societies and associations of small farmers, masters and labourers were supplied with forms containing a series of questions, the replies to which furnished useful information. These replies emanate from 110 agricultural societies, 720 associations of small farmers, 40 labourers' associations and 900 farmers, and they bear upon the wages of 6,700 persons engaged in agricultural labour.

The average annual wage of farm hands is 441 kroner, 285 for the summer and 156 for the winter. The food being valued at 354 kroner, this really brings up the wage to the equivalent of 794 kroner. The women have an average annual wage of 264 kroner, 153 for the summer and 111 for the winter ; board being estimated at 302 kroner, the result is in reality a wage of 566 kroner. In 1910 a male servant received 365 kroner and a female servant 220 kroner ; there has since then been an increase of about one fifth. Allowing for the value of board the increase is 30 % for the last five years.

An agricultural labourer in permanent employment, but not boarded, receives, an average of 3 kroner per day in spring and summer, 3 1/3 kr. during harvest and 2 kr. in winter. If boarded by his master he gets 2 kr. in spring and summer, 2 1/2 kr. in harvest time and 1 1/2 in winter. Assuming that he works throughout the year, the workman boarding out earns about 850 kroner, because in addition to his day wages he receives allowances in kind, for instance lodging, pasturage for one cow, fuel for heating and various other products. From 1910 to 1915, there was an increase of 161 kroner on the total received by these labourers.

Day labourers draw wages higher than those of labourers in permanent employ. Without board they get 3 1/2 kr. in spring and summer, 3 3/4 kr. in harvest time and 2 1/2 kr. in winter, that is to say 35 to 45 öre more than labourers in permanent employ.

Women in permanent employ but not boarded receive 2 kr. in spring and summer, 2 1/3 kr. during harvest, and 1 1/2 kr. in winter.

When boarded they have 50 öre less.

Work by the job is little practised in Danish agriculture. Only about 9 % of working days are paid for by the job, and the labourers are found more on small than on large farms. This kind of work is done chiefly in spring and summer, in the proportion of 11 % of the days of those two seasons. During harvest time there are only 8 % of the days paid for in this way, and the figure drops to 7 % in winter. Job labour, however, allows of earnings 41 % higher than day wages.

The working hours are from 9 to 10 in spring and summer, from 10 to 10.30 during the harvest, and from 8 to 8.30 in winter. These hours represent an average of net work. They have shortened from 1897 to 1905, since which latter date they have remained almost constant.

SWEDEN.

SVERIGES OFFICIELLA STATISTIK (Official Statistics of Sweden): Arbetartillgång, arbetstid och arbetslön inom Sveriges jordbruk, år 1914 (Labour supply, working hours and wages in Swedish agriculture in 1914). Stockholm, 1916.

This publication, which supplements the study published previously in these pages (February, page 120; March, page 111; April, page 114), was prepared by means of question sheets in sufficient detail filled out by the presidents of the communal councils in 2209 rural communes, representing 94 % of the rural communes covered by the investigation.

Supply of agricultural labour. — The question sheet employed for the enquiry put in the first place the question of the supply of agricultural labour in each rural commune. The reply was to be a general view and judgment indicating whether the agricultural labourers resident in the locality or returning to it regularly could be considered as ensuring sufficient labour for the coming agricultural work considered as a whole, and the reply was to take the form of one of the three words; good, sufficient, insufficient. The data collected prove that in 259 of the communes which answered, that is, 11.7 % the supply of labour was good; in 1476, or 66.8 %, it was sufficient, and in 464, or 21 %, it was insufficient; 10 communes, or 0.50 %, thought themselves unable to give a precise reply. In comparison with the previous year, the figures show a considerable increase in the supply of agricultural labour; this increase however is chiefly due to the fact that a number of workmen had changed over from industry to agriculture owing to the period of crisis, and consequently the position observed in the agricultural labour market must be considered, generally speaking, as being of a fortuitous character. The labour supply differed greatly in the different regions. The figures however which indicate the number of communes in the different departments where labour was insufficient do not allow of drawing any conclusions as regards the lesser or greater number of labourers in the respective departments, relatively to the area of cultivated soil.

In point of fact, what these figures principally bring to light is the more or less advanced degree of organisation in the agriculture of the different regions, and in particular the greater or less capacity of employers for saving labour by the use of machinery and means of transport, and thus, by working on economic lines, extricating themselves from their difficulty with the labour available.

Working hours. — The particulars furnished as to the working hours and division of labour regard only the working day in agriculture proper, that is to say, work in the fields, in the barns, on the threshing floors, etc.; they do not extend to the men in charge of cattle, who have a considerably longer day devoted chiefly to work of upkeep and repair in stables and stalls.

Moreover, for agricultural labourers proper, the figures of the report only apply to working hours during the summer, that is to say, to the three months of the year when work generally begins earliest and ends latest. In proportion as the days shorten the daily hours of labour are diminished; the working day is several hours shorter in winter than in summer.

On the average, for the entire country, the gross hours of labour per summer day, that is to say, the working hours including the rest intervals are 12.6 hours; the intervals for rest total 2.2 hours, and consequently the working hours, after deducting the intervals for rest, that is, the net working time, is 10.4 hours. During the 4 years in which enquiries were made as to agricultural labourers, no alteration whatever was found in these conditions, which depend on the general organisation of labour in agriculture and are consequently almost constant.

The hours and division of labour differ perceptibly in the different parts of the country. If the net working hours be considered as the chief point, it is found that there are in Sweden three zones in which it is below (or equal to) the average established for the entire country : one comprises the three provinces (län) of Southern Sweden and the province of Kalmar, the second the province of Gothenburg and Bohus, and the third a wide region in the middle part of Sweden, from Västernorrland to Östergöttland, both inclusive. The other parts of the country are distinguished by relatively long working hours.

Wages. — The report only claims to give a survey of the agricultural labour market for the country as a whole; hence there were only taken into account those conditions of labour which are common to the whole of agriculture, disregarding the differences presented by the various regions in this point. As a consequence, wage figures are only recorded here for a number of the most important groups of labourers found over the entire territory or at least in the greater part of the country. As, furthermore, the present enquiry is based only on general averages and not on individual data, it was considered that it could not serve to indicate accurately the wage rate except for the least qualified and worst paid labourers of these groups, that is to say, those whose wages are fixed generally by local custom; therefore the wages of specialised workmen or supervisors, whose remuneration is in proportion to their professional capacity, are not in question.

The wages generally paid to labour for the classes of labourers above

defined differ greatly according to the region. Taking the country as a whole, the following is the view which it presents :

As regards the most important branch of labour for small farms, unmarried labourers living in, their labour is remunerated by an annual wage in cash, besides food and lodging. The amount of the remuneration differs very much with each region, but, as an average for the whole country, the annual wages of a farm hand amount to 332 crowns (kronor) the food is valued at 370 c. (1 c. 01 per day) and the total product of the labour is therefore 702 c. per annum. For a female servant or hand the corresponding averages are 202 crowns, 299 crowns (0.82 c.) and 501 c. There are also given, in Norrland chiefly, clothing, sometimes of a fairly high value.

For the farm hands, generally married, who, under the name of *statare* (agricultural labourers on mixed wage) work on the large farms in the agricultural regions proper, and who, in addition to their annual wages averaging 334 c., receive a remuneration in kind called " *stat* " consisting of milk, cereals, potatoes etc., and are provided with lodging for themselves and their families, the labour reward amounts on an average to 811 crowns per year. This figure includes the value of the free lodging which, in Southern Sweden, usually consists of two bedrooms and a kitchen, but in the rest of the country generally, of one room, equalling 68 crowns, and the value of free fuel, averaging 47 crowns. Nevertheless, these particulars only concern ordinary plough hands, because those labourers of the « statare » class who look after the cattle and animals receive higher money wages and sometimes also larger wages in kind, so that their annual earnings are estimated at an average of 862 crowns.

Side by side with these labourers on mixed wage (statare), there are daily labourers on fixed wage, who are not paid at all, or hardly at all, in kind, and whose daily earnings vary greatly with the different regions. The day-wage averages 2.62 crowns in summer and 1.97 cr. in winter, but drops 0.82 cr. and 0.72 cr. respectively on the average if the labourer is found in food by the employer.

In addition to these daily labourers, who as a rule contract to work for one year, or at least six months, for a given employer, there are agricultural labourers who take on work sometimes with one, sometimes with another, according to the needs of the moment. In summer the daily wage for these odd or casual labourers averages 3.02 crowns, and in winter 3.24 crowns, they finding their own food. When found in food by the employer they receive on the average 2.10 cr. per day in summer and 1.46 cr. per day in winter.

Among labourers paid by the day there are also a large number of women employed as assistants in the cultivation of the beetroot and potato, in harvesting hay and wheat etc. ; they receive on the average 1.65 cr. per day in summer (or about 1.10 cr. with food), if they are regarded as forming part of the fixed labour staff of the farm. In the case of casual labour, the wage of these women in summer is a little higher, namely, on an average for the entire country, 1.81 crowns without food and 1.24 cr. with food.

During the winter months, the wage per day of labour is considerably reduced for the women, just as for the men, of the category of day labourers.

A general comparison between wages for 1914 and for 1911 to 1913 shows that — leaving out of account the farm hands in charge of cattle and animals, whose annual wage in kind has been maintained at practically the same level — agricultural labourers of all classes had their *money* wages increased 1.5 to 3.8 % during the period 1913-1914, 4.4 to 9.8 % during the period 1912-1914, and 6.4 to 10.8 % during the period 1911-1914. The increase appears to have been particularly marked for day labourers and female hands. On the other hand, if the total remuneration in cash and in kind is considered, it is found that the largest increase has been for labourers on a mixed wage (statare) and the other agricultural labourers who receive the major part of their remuneration in the form of products in kind, as the prices of the majority of household commodities have risen considerably during the period 1913-1914 in consequences of the international crisis.

RUGGERI ALFREDO, gerente responsabile.

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Part I: Co-operation and Association

GERMANY.

THE FEDERATED DAIRIES OF SCHLESWIG-HOLSTEIN.

SOURCE :

GEORGS (B.), Kiel : Jahresbetriebsergebnisse von 439 den Schleswig-Holsteinischen Meiereiverbanden angeschlossenen Meiereien im Jahre 1913-14. (*Results of the Financial Year 1913-14 of 439 Dairies affiliated to the Dairy Federations of Schleswig-Holstein.*) — Berliner Markthalle-Zeitung (Berlin Market-Place Journal) Year 30, No. 42. Berlin, May 26 1915.

In 1913-1914 the organisation of the dairy industry of Schleswig-Holstein comprised 595 dairies, being 19 more than in the previous year. Of these 222 are registered, 235 are free co-operative dairies having acquired corporate status, 70 are free co-operative dairies without corporate status, 54 are dairies forming part of private estates and 14 are central dairies (*Sammelmeiereien*).

The following is the number of Federations which submitted reports : in Northern Schleswig, 77, or 91.6 % against 59 or 70.2 % in 1912-1913 ; in Southern Schleswig, 177 or 91.7 % as against 177 or 93.7 % ; in Eastern Holstein, 70, or 38 % as against 75 or 42.2 % ; and, in Western Holstein, 115 or 89.8 % compared with 113 or 92.6 %. Thus we see that out of 595 federated dairies (576 in 1912-1913) 439, or 74.5 % (74.1 % in 1912-1913) submitted their report.

We may content ourselves with giving a survey of the annual results of the working years 1898-1913 of the Federation of Dairies of Southern Schleswig (*Meiereiverband Südschleswig*) so as to render clearly evident the importance of these dairy statistics :

		1898	1903	1908	1913
Number of dairies which communicated their results .		77	138	156	177
Quantity of milk required for the production of one pound of butter	kg.	13.61	13.45	13.15	13.07
Price of butter obtained :					
(1) Wholesale, per pound . . .	pfg.	91.61	107.76	121.53	125.50
(2) By parcel post » . . .	»	—	118.37	128.28	137.25
Financial yield per kg. of milk	»	7.19	8.12	9.33	9.74
Average, per cow, of milk delivered to the dairy . . .	kg.	2 363	2 421	2 617	2 577
Percentage of dairies :					
(1) using ferments for souring cream	%	41	84	94	97
(2) pasteurising the cream . .	»	30	86	97	100
(3) pasteurising the skim milk	»	—	84	92	100

An examination of these figures yields the following facts in relation to this federation : the number of dairies communicating information has increased ; the quantity of milk required for the production of one pound of butter has fallen off by kg. 0.54 as against the figure of 1898. The gross money product of a kilogram of milk is pfg. 2.55 higher ; the milk output has increased 214 kg. per year per cow ; and manufacturing has improved. In 1898 only 30 % of the dairies of Southern Schleswig pasteurised their cream ; in 1910, all had adopted this method.

Since 1902, the Chamber of agriculture has endeavoured to win over 4 Federations of dairies of the Province to the idea of compiling uniform statistics. We recapitulate below the data contained on the question sheets returned duly filled by the dairies.

1. *Quantities of Milk received and Utilisation.*

	Northern Schleswig	Southern Schleswig	Eastern Holstein	Western Holstein
Dairies which replied	77	177	70	115
Milk received. . . . . kg.	104,492,702	180,753,007	74,805.800	103.022,552
Milk sold . . . . . »	1,684,321	2,276,634	8,671,377	5,765,116
Milk treated . . . . . »	102,121,705	177,554,311	63,393,766	96,507,529
Butter manufactured, pounds	7,833,706	13,580,607	4,675,892	7,386,681

The 439 dairies in question took delivery of 463,074,061 kg. of milk. Each of them received an average of 1,054,838 kg. of milk per year, with a minimum of 114,035 kg. and a maximum of 5,678,662 kg.

The great majority of the dairies of Schleswig-Holstein are undertakings of limited extent, which convert their milk almost exclusively into butter.

2. *Butter Manufacture.* — If from the total quantities of milk received we deduct 18,397,448 kg. representing the milk sold, it is found that there were treated in the dairies 439,577,311 kg. of milk yielding 33,476,886 pounds of butter. The data furnished in this relation show that from kg. 11.50 to 15.20 of milk were required for one pound of butter; the ave-r-age for the year was kg. 13.13 which corresponds to about 3.40 % contents of fatty substance.

It is not possible to draw reliable conclusions from these facts as regards the greater or lesser capacity of managers. Nothing but an exact knowledge of each of the concerns and the contents of fatty substance in the milk which they receive would allow of doing this.

3. *Price of Butter.*— There is a considerable range between the maximum and the minimum wholesale prices; they vary from 120 pfg. to pfg. 137.50 per pound. The average wholesale price for 100 pounds was marks 126.40 The difference between the prices paid at any given time plays some part in this result, but the following causes also have contributed to this rise.

(*a*) The average price of butter is not computed in the same way in all the dairies.

(*b*) During the course of the various seasons there are fluctuations in production.

The differences seen in the prices of butter forwarded by parcel post, which show a minimum of 127 marks 73 and a maximum of 150 marks, making an average of 138 marks 37 per 100 pounds, appear to be due chiefly to the fact that some dairies have indicated the net and others the gross price.

4. *Inspection of the Butter.* —The Chamber of Agriculture has resolved that, for four years, the butter will be inspected every month in order to obtain a better standard of butter production in Schleswig-Holstein. Out of the 1313 tests, in 39.07 % of cases the butter was declared to be "superfine", in 53.01 % "fine", in 7.62 % "fair", and in 0.3 % "inferior". The butters examined, to the extent of 92.16 % were made from pasteurised cream, and 6.7 % from pasteurised milk, so that only 1.14 % had been manufactured with raw materials not put through this operation. Acidification was almost everywhere effected by means of pure cultures.

It was also endeavoured to ascertain whether the quality of the butter suffered owing to its being made with the mixing churn, and whether its contents of water were increased for that reason. The number of dairies working with mixing churns was 54 in Northern Schleswig, 113 in Southern Schleswig, 21 in Eastern Holstein, and 33 in Western Holstein. Both in Eastern Holstein and Northern Schleswig, the tests were somewhat in favour of the mixing churns. The butter made with churns of Eastern Holstein and that obtained in tests with mixing churns had almost the same average grade of water. It therefore cannot be assumed that mixing

churns have a deleterious influence on the quality of the butter ; the experiments carried out rather point to the contrary.

5. *Financial yield of one kg. of milk.*— The figures fluctuate between 7.99 and 19.70 pfg. Notwithstanding this wide range, it would be quite wrong to draw conclusions as to the capacity of the managers of the concerns. In order to do his one would need to know what was the average grade of fatty substance in the milk, whether the latter was sold in its original form or treated, whether the skim-milk and butter-milk were supplied free or entered in account. On the average, the milk delivered yielded 10 pfg. 43 per kilogram.

6. *The sales by auction* have increased to a notable extent. The quantity rose from 24,858 barrels in 1912 to roughly 30,000 barrels in 1913.

7. *The consumption of coal* for the conversion of one kg. of milk averaged 0 pfg. 17 (minimum 0.08 — maximum 0.62 pfg). The reason for these differences is to be found above all in the diversity of the concerns. It must also be borne in mind in this respect that fuel is either delivered at the cost of the concern, or the members undertake transport without any payment.

8. *Working Expenses.* — To cover these and pay off debts, 1 pfg. 16 per kg. of milk was deducted. The variations are from 0 pfg. 30 to 4 pfg. 60. To make clear the reason of this difference, we point out that :

(*a*) It is a matter in which the nature and extent of the undertaking (complete dairy business, sale in town, etc.) is reflected.

(*b*) Many dairies have no debts and can therefore fix a smaller deduction.

(*c*) In some cases, the members deliver their milk without any remuneration, whilst elsewhere the costs of delivery are payable by the co-operative society.

(*d*) The deduction is intentionally fixed higher by some dairies, with the object of being in a position to make a further payment at the end of the year.

9. *The Yield of Milk per Cow per year.* — It averages 2598 kg. Consequently on the average each dairy receives the milk of about 400 cows. The maximum yield is 4,175 kg. and the minimum only 1,323 kg. This is a difference of 2853 kg. It would almost seem that the number of 213,440 cows, given for the whole of the federated dairies, must contain inexact data in some instances, although the figures indicating milk yielding capacity may at times show great differences.

CANADA.

THE DAIRY INDUSTRY IN THE PROVINCE OF QUEBEC, AND CO-OPERATION.

OFFICIAL SOURCES :

RAPPORT DU MINISTRE DE L'AGRICULTURE DE LA PROVINCE DE QUÉBEC (Service de l'Industrie laitière, Rapport de l'Inspecteur général des Beurreries, p. 102 ; Rapport de l'Inspecteur général des fromageries, p. 109). Sixième rapport annuel des opérations de la Société Coopérative des fromages de Québec, p. 122. (*Report of the Minister of Agriculture of the Province of Quebec* (*Dairy Industry Department, Report of the General Inspector of Butter-making, p.* 102 ; *Report of the General Inspector of Cheese-making, p.* 109). Sixth Annual Report of the Operations of the Co-operative Society of Cheese-makers of Quebec, p. 122) Impr. E. E. Cinq-Mars. Quebec, 1916.

STATUTS DE QUÉBEC, 5 GEORGE V, 1915 ; CHAP. 31 : Loi amendant les Statuts refondus 1909, relativement à la Société d'industrie laitière de la province de Québec et à la fabrication des produits laitiers. (*Statutes of Quebec, 5 George V*, 1915 : *Chap. 31 : Law amending the consolidated Statutes of* 1909, *in reference to the Dairy Industry Society of the Province of Quebec and the manufacture of Dairy Products*).

LE JOURNAL D'AGRICULTURE ET D'HORTICULTURE. (*The Journal of Agriculture*) Published by the Ministry of Agriculture of the Province of Quebec. Vol. 19, N° 9, March 15, 1916.

§ 1. THE DAIRY INDUSTRY AND ITS REORGANISATION.

The dairy industry in Canada is supported by the Federal Government (through the Federal Dairy Department), and by the Provincial Government (through the provincial Dairy Associations and their officers) (1).

In the Province of Quebec the dairy industry only began to make regular progress after the establishment of the Dairy School of St. Hyacinthe, and the enactment of butter and cheese making inspection. Both federal and provincial legislation systematically aim at ensuring that all Canadian products of this description shall be of good quality, by means of enactments based on technical requirements and increasing stringency of official inspection of butter and cheese factories. To this end the Government, by different measures, compels some uniformity in the methods of making cheese and butter so as to bring about the like uniformity in the quality of the product.

(1) See this *Review*, " Agricultural Organisation in Canada ", 2nd Year, No. 10, October 31 1911.

It is an ascertained fact that the market of the world is flooded with bad butter. This is due both to defects in manufacture and to the quality of the cream supplied. In order to turn out good butter, the cream on reaching the factory must be in a good condition. Hence arises the question of cream centralisation. This is effected in Canada (and in this instance in the province of Quebec) in two ways. In the first case the cream is made at, or conveyed to, the factory : in the second it is collected at home or forwarded individually to the place of centralisation. The first method applies to creams coming from within a small radius ; they are first of all properly pasteurised and afterwards sampled and tested by the owner of the establishment, who records the results. Then, after special steps to ensure their keeping, they are forwarded to the butter makers under contract. Consequently, in these establishments, the cream is tested on receipt classified according to quality, safeguarded against deterioration in transit by pasteurisation, while the interests of the producers are looked after by the manufacturer. The second method applies to centralisation by individual contract, which is far from satisfactory. " These individual contracts ", says the Inspector General of butter manufacture, in his latest report to the Minister of Agriculture of the Province of Quebec, " differ from purchases at the factories inasmuch as collection is less frequently done and the producer is left at liberty to fill his can or container before forwarding it, even should he require eight days ; that he can postpone forwarding if the journey disturbs his work to any extent ; that the never checks the cream despatched for its fatty contents, which will nevertheless form the basis of the money equivalent he will get ; that he never knows the current market prices according to which the value of the fatty substance will be determined ; this means that the cream is always good, whatever its age, its consistency, its keeping condition or its acidity. "

For these drawbacks there is only one remedy : constant and stringent examination of the cream used in butter manufacture as well as the methods of manufacture. In the same way, in order to obtain good quality cheese, no less strict a supervision must be exercised over the milk supply and the operation of cheese factories.

Such is the object sought after by the law of the 5th March 1915 " amending the Consolidated Statutes of 1909 with reference to the Dairy Industry Society of the Province of Quebec and the manufacture of milk products ".

The following is the purport of its enactments.

With a view to a more rapid and complete spread of the best methods of milk production, and manufacture of dairy products, and to the progress of the dairy industry generally, the Dairy Industry Society of the Province of Quebec (a provincial organ of Government action, as stated above, the Minister and Assistant Minister of Agriculture being *ex officio* members of the directing Board) may, by regulations approved by the Lieutenant Governor in Council " divide the Province into regional divisions not exceeding fifty ". The Lieutenant Governor is at liberty to appoint inspectors general and assistant inspectors general, and for each of the regional

divisions an inspector. These officers shall be experienced persons with special qualifications. Their principal duties consist in inspecting the production and supply of milk, as well as the manufacture of butter or cheese, in the dairy product establishments of their respective regional divisions, or even outside the latter if the Minister so directs.

Such is the constitution of the inspecting staff. To deal now with the provision referring to the societies direct.

Any person, company or society carrying on a butter factory is bound to secure the services of a superintendent of manufacture holding a diploma or certificate as milk or cream tester issued by the office of examiners of the Dairy Industry Society. The holder of this diploma must classify the cream brought or sent to the factory by the suppliers and divide it into two classes, class No. 1 being cream suitable for manufacturing first class butter, and class No. 2 any other cream. The cream of each class is converted separately into butter. The sale of each class of butter must also take place separately, and the proceeds of such sale are divided among the suppliers, according to the quality and proportionally to the quantity of cream of each class delivered by each supplier. The above mentioned classification, manufacture and sale are thus done separately, in accordance with the regulations made by the Inspector General of Butter Factories, with the prior approval of the Board of examiners of the Dairy Industry Society.

The regulations for the classification of milk and cream made on the farms, and also for the classification and sale of butter or cheese adopted by any agricultural co-operative society or other society or company owning a butter or cheese factory, shall not be valid until after approval by the Inspector General of Butter Factories or of Cheese Factories as the case may be. These regulations may provide for: (*a*) the classification of the cream delivered into two classes as stated above ; (*d*) the separate conversion into butter and the separate sale of the two qualities of butter ; (*c*) the separate distribution of the proceeds of sale of each class of butter among those entitled thereto ; (*d*) the classification into two separate classes of the first and second quality milk and cream.

Any co-operative agricultural society or other society or company owning a butter or cheese or butter and cheese factory may, on behalf of the society, prosecute any supplier of dirty, skim or adulterated milk, whether he is a member of the undertaking or not, as well as " any other person or society for any damage occasioned to the said society in its industry and trade in dairy products ".

The damages obtained are divided among the members proportionally to the quantity of cream or milk furnished by them during a period of time determined by the directing Board.

The owner or manager of a butter or cheese factory or of both is bound to pasteurise the skim milk and whey of butter and cheese originating from the milk or cream brought to and treated in his establishment.

The books of distribution and accounts of the enterprise may be exa-

mined by the inspector or by an officer of the Department of Agriculture, if the proceeds of the milk or cream are divided among the suppliers.

The owner or manager of any butter or cheese factory must, by the 15th January in each year at latest, hand to the Minister of Agriculture a report stating : (1) the number of pounds of cream or milk received at the factory during the preceding year ; (2) the number of pounds of butter or cheese manufactured in his establishment during the same year ; (3) the number of his suppliers ; (4) the amount received as the price for the cheese manufactured ; (5) the amount received as the price for the butter manufactured.

Finally, to assist in defraying the expenses of the inspectors general, their assistants, the inspectors or persons appointed to take their place, a sum of 15 dollars per year is due to the Ministry of Agriculture from each butter or cheese factory or each factory of condensed milk or milk powder in operation for at least thirty days in each year.

§ 2. Official inspection of cheese factories.

This law, which received assent on the 5th March 1915, came into force at once. At the end of the same year therefore conspicuous results were observable, and the Inspector General of Cheese Factories, in his annual report, pointed out the successful effects of the new enactments, which represent not indeed an absolute innovation but an improvement of the methods previously applied. This effect cannot fail to become more marked as time goes on.

To give an idea of the effectiveness of the official control over the cheese factories of the Province of Quebec, the following data may be of use.

The inspection service comprises two inspectors general and five assistant inspectors general. The province is divided into five districts, each under the surveillance of an assistant inspector general ; these districts are in turn split up into divisions totalling fifty (as provided in the law analysed above), each forming the competency of a local inspector. The divisional inspectors make a weekly report to the Ministry of Agriculture of the Province on the work of the week, and the district inspectors a monthly report dealing wih the condition of the factories and the milk and cream received, etc., according to the weekly reports of the local inspectors of the district in question.

This report brings under the notice of the inspectors general those factories which receive milk showing acidity more than 22, those having creams prepared at the establishment and exceeding acidity 45 in churning, or butter-milk exceeding 55 ; those having cream preserved by means of preservatives or exceeding 50 in acidity, or butter-milk exceeding 60 acidity. It also reports on the observance of the regulations prescribed by the Inspector General on manufacturing superintendents, qualified or not, making tests of milk or cream without the certificate of an ex-

pert assayer, on the method of carriage of the cream and the number of deliveries per week, on bad drainage, on the way the factories are kept, outside and in ; and on the butter yield of the fatty substance ; finally it mentions those establishments where the curds remain in the whey less than two and a half hours, those which do not pasteurise the whey, those receiving it after 8 a. m., those forwarding green cheese, etc.

The local inspector supervises the establishment by making one-day inspections or short visits, as he thinks best. Every week he prepares two reports, one for the Ministry of Agriculture, and the other for the assistant inspector general of his district. Furthermore, the local inspector, at the beginning of the season, draws up a special report giving the name of the factories and their number in rotation, and at the end of the season a complete report on the state of each establishment in his division. Through these different reports the department and the inspectors general are kept fully informed of what is taking place and of the work of each inspector.

It may appear somewhat premature to draw conclusions as to the efficiency of an inspection system which has only been practised for one season, but it must not be forgotten that the new system is only the old one with improvements. The principal improvements made by the new law relate particularly to the cheese-making industry : the division of the province into districts, the independence of the inspectors, the abolition of the milk test replaced by controlled receipt of milk, and a larger number of short visits to the factory.

The province being divided into districts, each district is entrusted to an assistant inspector general, whose task it is to call upon and supervise the inspectors under his orders. Being always in the same region, he can form a better conception of the work of the inspectors under his direction and the progress achieved. As he has the responsibility for his district, all that relates to it is subject to him. It is he who recommends the granting of licences and diplomas, as well as their refusal or cancellation when necessary ; being responsible for the inspection of the establishments in his district, he strives after improvement of the products and gets rid of those factory superintendents who are without the necessary capacity or will not take proper steps to improve their position.

As regards refusal of licences or cancellations of diplomas, the inspectors are instructed to advise the manufacturers of the reason of their possible forfeiture of the right to make cheese, so that no one should be taken by surprise and all should be enabled to mend their ways where necessary.

The pecuniary independence of the inspectors has long been demanded by the latter themselves and by those interested in the dairy industry. The new law provides for this by imposing a tax of 15 dollars per year on the butter and cheese factories and charging the Government with the remuneration of the inspectors. The advantages of this reform are evident.

The replacing of the testing of milk by the passing of the milk on receipt is a particularly important change. It is impossible for an inspector to properly test and to pass the milk for receipt at the same time, because

passing for receipt consists in thoroughly examining the cans or containers in which the milk is brought. If this examination is properly made, the inspector has no time left to do anything else. On the other hand, in order that supervision over the quality of the milk should be effective, it should be carried out every day by the superintendent of manufacture. Needless to say, for this purpose he must be qualified to test the milk in the manner prescribed by law. The passing of the milk for reception by the inspector presents great advantages. The inspector does not confine himself to refusing the bad milk but he also gives advice as to the precautions to be adopted to keep the product in its original condition. If the cans are dirty, he points out the impossibility of supplying good milk in such cans. Finally he endeavours to get the supplier to estimate the loss occasioned by the bad milk brought to cheese factories, a loss in quality and in yield which is much higher than is generally believed.

With regard to the importance of the short visits it follows from the principal object of the inspection of the establishments, which is the turning out of products of the best quality. To secure this result the establishments must be inspected as often as possible, which cannot be done if the officer entrusted with this duty spends an entire day in each of them when he calls. On the other hand, by reducing the length of the visits, he is able to call at five or six cheese factories per day instead of one. This will enable him always to be fully informed of what is taking place in his region, and to avert a host of errors in manufacture by giving warning in good time to the managers of the cheese factories when the method adopted requires modification.

The following few figures show the activity of the inspectors in 1915 :

Average number of establishments per division.	42.54
Average number of long visits (work days of inspector) . . .	88.74
Average number of short visits.	178.38
» » » per establishment.	6.41

Thanks to these manifold inspections a number of establishments have already decided to improve their installation (cement paving, cooled ripening chamber, and drainage system). In view of the insistence of the inspectors who point out in writing to the owners the improvements required, there is reason to believe that the conditions of manufacture will undergo still further amelioration in the future.

The report of the inspectors general of cheese factories records that the most serious hindrance to the progress of the dairy industry is formed by the small factories. Their number is considerable, as results from the following statement showing the average quantity of milk received per day during June 1915 in different groups of establishments engaged in cheese making generally :

190	factories	received	an average of . . .	1517 lbs.
296	»	»	» . . .	2468 »
255	»	»	» . . .	3378 »
166	»	»	» . . .	4366 »
94	»	»	» . . .	5322 »
48	»	»	» . . .	6364 »
30	»	»	» . . .	7351 »
27	»	»	» . . .	9147 »

The report unfortunately does not specify the number of co-operative societies comprised in each of these categories. In view of its being almost impossible to obtain a perfect cheese in small establishments, and the almost insuperable difficulties which prevent small manufacturers adopting all the necessary up-to-date improvements in plant, the inspectors endeavour to group these factories in twos or threes in order to reduce their number and increase their productive powers, which cannot be otherwise than favourable to the quality of the cheese obtained.

§ 3. The work of the co-operative agricultural society of cheese-makers of Quebec.

Among the co-operative undertakings of the province in the department of Dairy industry the most important is unquestionably the co-operative agricultural Society of Cheese-makers of Quebec.

This Society was founded in April 1910, and its brilliant activity is a very fine example of the results which may be yielded by co-operation.

It has the great merit of having introduced, with the support of the Ministry of Agriculture, the sale of dairy products after classifications, that is, according to quality, in Quebec. It had a very modest beginning. Organised by thirty farmers who had each subscribed for one 10 dollar share payable at the rate of one dollar per year, it had, at the 15th November 1915 (the date of the sixth annual report of its operations) 1,800 members, a paid-up capital of 1373 shares or $13,730 on which $2,088 had been paid. These figures however are still modest, and give but an inaccurate idea of the commercial importance of this association. The considerable character of its operations is attested by its aggregate turnover, which at the 31st December 1915 amounted to $2,077,564.96. With regard to the surplus appearing in the balance sheet, being $5,946.71 at the 1st January 1915, it amounted at the date of the report to $18,696 after deductins the sum required for the payment of an annual dividend of 6 % on the capital paid up in the last two years.

This prosperous position is easily explained. Shareholdership of the Society affords indisputable advantages to farmers wishing to derive the

largest possible profit from their products. By its means (a point to which we shall revert) the farmer obtains the highest market prices for his products ; every year it distributes to its members a dividend on the paid-up capital ; it also sends them a circular every fortnight containing the prices obtained for each product during the two preceding weeks, and market reviews. Under these circumstances it is not surprising that its progress has been rapid, so much so that 500 new members joined the Society in 1915.

It confined its activity first of all to the sale of butter and cheese. A system of selling the products after their classification has proved quite effective in practice, as it constitutes a guarantee to the buyer and brings with it a remuneration to the good farmer who is rewarded for his efforts by the additional profit yielded by his better quality products, which in turn spurs him on to greater production. We may add that the classification is made by experts of the Provincial Dairy Industry Society, and that consequently it offers every possible guarantee of impartiality. According to the testimony of two assistant inspectors general supervising this work in 1915, the following is the effect of this method : " At the beginning of the season there came to hand a large quantity of cheeses originating from new factories, bad in appearance, irregular in weight, boxes badly made, with bad wood, cheese badly finished.... after a few weeks of check by classification there was a complete change and these consignments have now come up to the standard. The over-acid cheese has almost disappeared, which proves that the quality of the milk is improving. The uniformity in weight is remarkable, which is a very valuable market quality ". In short, thanks to this supervision, greater uniformity in manufacture, weight, get-up and packing is secured.

The Society has largely contributed to obtaining a just appreciation of Quebec cheese on the English market, thus increasing the profit of the producers.

While defending the interests of farmers from the commercial point of view, it also exerts an educational action on them. During the expired year it has continued to extend the manufacture of pasteurised butter in the province, which butter, owing to its flavour and keeping qualities fetches a higher price from the dealer and the consumer.

It has also organised prize competitions among manufacturers of pasteurised and non-pasteurised butter.

From 1914 onwards the Co-operative Agricultural Society of Cheesemakers of Quebec also took up the sale of fresh eggs and poultry, and in 1915 it extended its business to several other branches of agricultural industry, such as the sale of sides of bacon, maple syrup, maple sugar, canned apples and plums, and meat from the Government abattoir at St. Valier (1).

(1) This abattoir school was built in 1914 by the Department of Agriculture. Its object is to train experts for the cured meat industry, to stimulate pig rearing for bacon in the district and province, and to teach the best methods of breeding, slaughter, and curing.

TABLE I. — *Sales effected by the Co-operative Agricultural Society of Cheese-makers of Quebec* (1910-1915).

Year	Product	Quality				Total	Annual turnover
		N. 1	N. 2	N. 3	Pasteurised Butter		
							$
1910	Cheese	20,746 boxes	14,610 boxes	4,279 boxes	—	39,635 boxes	361,938.00
1911	»	19,776 »	36,499 »	22,519 »	—	78,797 »	1,001,750.83
»	Butter	6,989 »	6,251 »	617 »	327 boxes	14,184 »	
1912	Cheese	23,976 »	39,026 »	26,486 »	—	89,488 »	1,358,026.11
»	Butter	13,053 »	9,316 »	1,883 »	2,785 »	27,037 »	
1913	Cheese	23,436 »	35,276 »	17,933 »	—	76,205 »	1,351,412.63
»	Butter	19,250 »	13,478 »	1,076 »	5,806 »	39,610 »	
1914	Cheese	32,064 »	43,052 »	23,015 »	—	98,131 »	
»	Butter	24,277 »	8,659 »	—	6,742 »	39,678 »	
»	Fresh eggs	253 » of 30 doz.	129 » of 30 doz.	—	—	382 »	1,702,580.37
»	Poultry	9,873 lbs.	6,186 pounds	5,574 pounds	—	31,633 pounds	
1915	Cheese	42,400 boxes	43,139 boxes	22,440 boxes	—	107,979 boxes	
»	Butter	27,883 »	9,241 »	1,125 »	9,321 »	47,570 »	
»	Fresh eggs	1,623 » de 30 doz.	830 » of 30 doz.	—	—	2,453 »	2,077,564.96
»	Poultry	18,230 pounds	24,829 pounds	19,518 pounds	—	62,577 pounds	
»	Maple syrup	261 gallons	1,479 gallons	501 gallons	—	2,241 gallons	
»	Maple sugar	798 pounds	9,698 pounds	2,673 pounds	—	13,169 pounds	
1st Jan.-15 Nov.	Fresh and cured meat	—	—	—	—	62,285 »	—

This growth of its activity is due to the fact that in the previous year a number of local co-operative societies organised in different parishes of the province joined the Association and that 25 of these societies sold their products through its agency in 1915.

The following table gives the quantity of products sold through its agency since it entered upon operations, together with its turnover year by year :

Total butter and cheese of each quality sold from 1910 to 1915 :

Product	Quality N. 1	Quality N. 2	Quality N. 3	Pasteurised Butter	Aggregate Total
Cheese	162,401 boxes	211,602 boxes	116,672 boxes	—	490,675 boxes
Butter	91,452 »	46,945 »	4,701 »	24,981 boxes	168,079 »

Total turnover from 1910 to 1915 :

$7,853,272.90.

The advantages to producers of effecting sales through the Society, as pointed out by us above, are made strikingly evident by the following table showing what a butter factory which sold its products to the Co-operative Agricultural Society of Cheese-makers of Quebec would have lost during the 1915 season by disposing of its butter direct on the market of St. Hyacinthe.

This a table is a complete demonstration of the favourable results which rational co-operation may achieve, and is the best kind of propaganda for the development of co-operative societies in Canada.

TABLE II. — *Co-operative Sales and Direct Sales.*
What a Butter Factory would have lost in 1915, *by selling its Butter direct.*

Month	Number of boxes	Weight (in pounds)	Price obtained by the Co-operative Society	Price which would have been obtained on the market of St. Hyacinthe
			$	$
May	218	12,208	3,536.82	3,564.12
June	169	9,464	2,602.18	2,521.96
July	218	12,208	3,372.60	3,333.40
August	232	12,992	3,599.82	3,492.16
September	209	11,704	3,445.61	3,277.89
October	201	11,256	3,625.51	3,565.80
November	84	4,704	1.487,71	1,411.40
December	20	1,120	369.60	336.00
Total	1,351	75,656	22,039.85	21,502.53
Difference of transport from St. Hyacinthe to Montreal $0,22 per 100 pounds				166,44
				21,688.97
Total amount obtained from the Co-operative Society				22,039.85
» » which the butter factory would have obtained in the markets of St. Hyacinthe				21,688.97
Amount gained by selling to the Co-operative Society				$ 370.88

Pasteurised butter fetched on the average ¼ *cent* more per pound than N° 1 butter ; therefore this factory would have made $189.14 more if it had turned out pasteurised butter.

NORWAY.

A BRIEF SURVEY OF AGRICULTURAL CO-OPERATION IN NORWAY.

SOURCE:

OVERAEE (Hans): Samvirke-foretagender i Norge (Co-operative Undertakings in Norway). Christiania, 1914.

§ 1. HISTORY OF THE MOVEMENT.

The geographical configuration of Norway, with its mountains, forests and fiords, placing such great difficulties in the way of communication, and accustoming the inhabitants to rely upon their own forces alone, is anything but favourable to the development of co-operation, so much so indeed that for many years the difficulty, not to say the impossibility, of combining the Norwegian citizens into groups with common economic interests had almost passed into a proverb.

The products of Norwegian agriculture moreover were until a very late date almost exclusively consumed on the spot, so that the development of co-operation lacked one of the principal incentives existing in other countries, that is, the need of organising by its aid on distant markets the sale of large quantities of agricultural produce. Not only so, but very little has been done in Norway to promote co-operation either by the public powers or private persons. Some endeavours were set on foot merely in a spirit of imitation of what was taking place abroad, and without taking the special conditions of the country into account. The literature dealing with co-operation is also poor. The few remarks which here follow will show how slow was the progress of co-operation in that country.

The first Norwegian co-operative society, the Rausjödal dairy, was founded in 1855 by 30 small farmers in an out-of-the-way district in the North. Their initiative is consequently not the product of external influence but of a local need which made itself felt. In the following year 3 more co-operative dairies were opened.

In 1866 (the same year as in Denmark) the first consumers' society was founded, which awakened great interest in all social classes.

In 1869 a first endeavour was made to set going a co-operative society for the purchase of seeds ; in 1855 the agricultural society of Akershun decided to buy chemical manure and livestock for its members, which example was rapidly followed by other societies. In 1889 we have the first important public discussion on agricultural co-operation at the « Association for economic agricultural interests " of Christiania.

From that year onwards the interest in co-operative undertakings underwent rapid spread, though the actual progress of the co-operative movement still remained small.

In 1895 there was started the first co-operative society for the exportation of agricultural produce : in the following year there was founded at Christiania the first big co-operative association among agricultural societies for the purchase of the raw materials required by farmers. Two years later, in 1897, a large gathering of farmers was held, which proceeded to appoint a committee to consider the formation of a co-operative abattoir to work for exportation. Non until 1899 however did the enquiries carried out with this object bear fruit, the first Norwegian co-operative abattoir being created at Aalesund. In the same year there was formed a Union between the agricultural societies of different provinces for purchase in common, having its seat at Bergen.

The new century witnessed in Norwegian agriculture the beginning of a new era in many matters, including that of co-operation. Till then, the movement had been mainly theoretical, and had expressed itself in meetings, discussions and commissions, without any notable practical results being obtained. Nor indeed could it be otherwise. It had been the example of Denmark which had impelled the Norwegians to seek in co-operation almost exclusively the means for increasing the exportation of their agricultural produce, without taking sufficient account of the difference existing between the agriculture of the two countries. Denmark produces much more than it consumes, hence the need to export; with Norway this is not the case, consequently that country needed to set other objects before itself in co-operation. Realising this truth at last, and made wise by experience, the co-operators set out upon the right road, and year by year a growth has been noted in co-operative institutions, likewise powerfully assisted by the action of the public authorities, and in particular by the interest taken by the great association for the welfare of Norway (*Selskapet for Norges Vel*).

A few figures may here be adduced to show the progress achieved of late years by Norwegian co-operation.

In 1913 there were in Norway 1787 associations of a co-operative character. Their distribution according to the purpose of their operations and their business turnover are shown by the following table :

TABLE I. — *Number and Importance of the Associations of a co-operative character in the financial year* 1912-1913.

Nature of the Society	Number	Number which replied to the enquiries	Turnover (in kroner)
Dairies and cheesé makers	660	660	About 26,000,000
Collective butter sellers	37	—	467,990
Abattoirs	2	1	1,814,881
Associations for joint purchases	5	5	9,771,143
Butter exports	6	4	1,443,362
Sale of eggs	31	22	298,017
Sale of wood	73	43	2,824,430
General collective sales	3	3	1,210,000
Consumers' societies	370	252	18,544,665
Total	1,187	990	62,374,298

The number of associations of a co-operative character therefore approximates to 1200, covering the production and sale of almost all agricultural produce.

From the table it will be seen that there are societies handling one product alone ; others on the contrary make all the typical products of Norwegian agriculture the object of their operations.

The 5 great associations for collective purchases of the raw materials required for agriculture are formed of the union of 1344 societies each of which constitutes an autonomous body in its own territory.

The business turnover of the 990 co-operative societies which replied to the enquiries exceeded, during the period of one year, 62 million kroner, or 100 million francs, but to this figure there should be added the by no means small amount of the societies which did not reply, and as to which therefore the figures are not to hand.

In any event the figure of 100 million is in itself very high if we consider that the total population of Norway in the year under review did not exceed 2 ½ millions and the rural population 1,700,000 inhabitants.

Having thus cast a glance at the general movement of agricultural co-operation, it now becomes necessary to review individually the development of the different kinds of co-operative societies, beginning with those of producers.

§ 2. Producers' co-operative societies.

A. — *Dairies and Cheese-makers.*

The first attempts at co-operation in the department of the production and trade in milk date back to more than half a century ago, but it was not until the last decades of the nineteenth century that the movement grew with marked rapidity.

In 1855 there was founded the first co-operative dairy; since then the ten-yearly increase (and from 1895 the five-yearly) is as follows:

1865	7	1900	734
1875	39	1905	661
1885	186	1910	618
1895	469	1914	660

In 1910, in addition to the 618 co-operative dairies, there existed 120 private dairies and cheese makers, that is in all 738 concerns, the aggregate milk output of which was 238,689,000 kilograms, paid for to the producers at the rate of 10.2 kroner per kilogram of full-cream milk and 6.7 per kilogram of skim milk.

Of the 738 dairies:

225	or	31 %	had	an	output	below	100,000	kilograms	per	annum
196	»	27 %	»	»	from	100,000	to	200,000	kg.	per annum
203	»	28 %	»	»	»	200,000	to	500,000	»	»
65	»	8 %	»	»	»	500,000	to	1,000,000	»	»
28	»	4 %	»	»	»	1,000,000	to	2,000,000	»	»
11	»	2 %	»	»	in excess of 2,000,000 kg. per annum.					

B. — *Co-operative Societies for the Sale of Butter.*

In many parts of Norway it is difficult to get together a sufficient quantity of milk to start a dairy or cheese factory. Under these circumstances a simpler form of co-operation has been thought out; unions for the sale of butter. On a given day of the week each member brings his butter to the premises of the society where it is once again manipulated, and reduced to a single mass of the same quality which has the advantage of being homogeneous, and therefore sells at a higher price.

The first society of this kind was founded in 1871; from 1880 onwards these co-operative societies spread rapidly, though owing to their nature they remained confined to a few districts in the northern part of Norway (provinces of Nordland and Tromsö).

In 1912 there were 37: the following are the principal facts concerning them.

The average membership per society was 49, and the number of cows 181.

For each member there were 3.7 cows.

The average annual output of butter per society was 6654 kilos, and the turnover 12,646 kroner.

C. — *Co-operative Abattoirs.*

These societies did so well in Denmark that Norwegian breeders have repeatedly attempted to introduce them in their own country. The first endeavour to open a co-operative abattoir occurred about 1880, but the society did bad business and very shortly had to suspend operations. Subsequently the question was repeatedly agitated in different parts of the country, but fruitlessly. Not until 1899 was another co-operative More and Baumé abattoir formed, which however likewise ceased to exist after two years. The third attempt took place in 1904, and was more successful, the abattoir being still in existence, but not very active.

The reason of the failure of these three societies lies principally in the want of experience of the founders and managers, and in the fact that the production was not large enough to feed the slaughter houses, particularly those which had been opened with the object of exporting their products.

At last, in 1911, after many years' dogged work, the first large co-operative Norwegian abattoir was constituted, formed exclusively of small peasants. The capital subscribed was 300,000, kroner, and the number of cattle belonging to members attained the figure of 30,000.

This abattoir is now in a flourishing condition. The number of members has risen from 5041 to 5815, the number of head of cattle from 30,000 to 53,593 (March 1913) with an average of 92 head per member; and the annual balance sheet fluctuates about an amount of 2 million kroner of receipts and expenditure.

§ 3. Agricultural unions for collective purchases.

The foundation and development of co-operative dairies in the last half of the preceding century marks the passage from agriculture consuming its own products to agriculture producing for sale. This transformation naturally calls forth the need for the purchase of larger quantities of commodities required for the cultivation of the fields, in particular manures and seeds. Experience soon made it evident that when isolated individuals or small societies purchase they generally pay high prices and receive inferior goods.

The only course open to agriculturists in order to obtain good products at reasonable prices is that of combining into co-operative societies for the purpose of collective sales. In Norway it was the local agricultural

associations and the co-operative dairies which took the initiative in forming more extensive unions for purchasing the manures and seeds required for their members.

It is not precisely known when the first collective purchases took place, but it is certain that little by little the associations in particular combined into more extensive organisations, in which collective purchases were made one of the primary objects for which the associations existed.

There were thus formed 5 large associations about wich there were grouped all the small local unions scattered throughout the country. These associations at present comprise 1344 unions and their development may be easily followed from the table below, which gives their total annual balance figure from 1896 to 1913.

Year	Figure of Balance — Kroner
1896-97	243,609
1897-98	411,980
1898-99	395,140
1899-900	602,870
1900-901	734,560
1901-902	951,220
1902-903	1,356,450
1903-904	1,402,000
1904-905	2,711,000
1905-906	3,218,000
1906-907	4,064,270
1907-908	5,793,305
1908-909	4,696,358
1909-910	5,799,680
1910-911	6,347,901
1911-912	10,249,719
1912-913	9,771,143

As will be seen, the growth is continuous and rapid : in 17 years the annual turnover increased forty times and in the entire period together it attained to nearly 60 million kroner.

Not only so, but the amount of purchases carried out represent an ever-growing proportion of the total purchases by Norwegian agriculture. Precise figures are only available for chemical manures which, owing to their homogeneous character, are better adapted for purchase in large quantities.

The following are in point of fact the total purchases of manure for Norwegian agriculture which took place from 1900 to 1911 and the amount durchased by co-operative societies :

Quantity of Manures Purchased.

Year	In the whole country — tons	By co-operative societies —	Percentage —
1900	18,034.4	5,123.4	28.4
1906	41,280.9	17,956.0	43.5
1911	47,901.0	29,772.0	51.5

The aggregate quantity of manures used by Norwegian agriculturists increased more than two-fold from 1900 to 1911; during the same period however the amount bought by co-operative associations increased almost six-fold.

In order to understand how these co-operative societies operate, it is thought desirable to add here a few observations as to their organisation, which relate in particular to the biggest of them, the "Union of Agricultural Societies for collective Purchase" (*Landhusholdningsselskapernes faellesköp*).

The local sections are bound to purchase manures through the Federation, but for other goods no such obligation exists.

The capital required for these operations is obtained by means of loans granted by the local bodies and drawn from special funds put aside for this purpose, or from the available general funds. The local bodies sometimes only guarantee the loans contracted by the societies with private persons.

The number of members of each association is usually very high. Thus in the case of the Union just mentioned it attained the figure of 16,588 distributed over 8 provinces. In most cases, however, the membership is below this, and the operations of the association cover two or three provinces at most.

Each Union embraces a certain number of local sections, which usually must consist of at least 10 members; the one mentioned above possesses as many as 574 sections; another society, that of Agder, on the other hand, only has 50. The central direction is generally formed by the representatives of the individual sections, one for each section. It elects the chairman, vice-chairman, and, if necessary, inspectors; it carries out collective purchases, and distributes them as required among the local shops or sections, which in turn hand them on to the members. The sections are collectively responsible for the goods purchased, and generally have to pay for them within 30 days following the forwarding.

Losses, if any, are distributed among the sections in proportion to the purchases; the profits serve to form a reserve fund, with the exception of 2% which goes to benefit those sections that are up to date with their payments. When the reserve fund has reached one tenth of the average balance sheet figure of the last three years a further allocation to the sections may be made.

§ 4. Co-operative sales societies.

We have already stated that the sale of agricultural products was one of the primary and principal incentives in Norway to the formation of co-operative bodies.

As far back as the last two decades of the expired century the idea of founding co-operative societies for the sale and export of some agricultural products was much discussed ; not until the first years of this century however was a beginning made of carrying the idea into effect, at the time when the increase of agricultural production gave birth to the difficult problem of the marketing of the goods in excess of local needs.

The excellent results secured in this department by co-operation, especially in Denmark, impelled Norwegian agriculturists to have recourse to this means for securing the same results.

There are 5 descriptions of co-operative sales societies in Norway:

1) Co-operative butter export societies.

2) Co-operative egg sale societies.

3) Co-operative wood sale societies.

4) Co-operative societies for the collective sale of various agricultural products.

5) Co-operative city milk supply societies.

We will deal with them in their order :

A. — *Co-operative Butter Export Societies.*

There are at present 6 ; but the particulars on hand relate only to 4.

Each society is formed by the union of a number of dairies — from 10 to 20 — and its object is to conclude collective contracts in favour of its own members at the highest possible prices.

The societies make it their chief work to promote the exportation of the butter to England, but they do not object to extending their operations to other markets also. No dairy can conclude contracts without the approval of the direction of the co-operative society, consisting of one director and two members elected at the general meeting, at which each dairy has a vote.

The direction is also concerned to improve the packing of the goods, to ensure uniformity of quality of the butter and facilitate forwarding. It may expel any dairy which fraudulently and systematically supplies bad goods.

The expenses are divided among the dairies in proportion to the quantity of butter supplied.

How effective the work of this society is may be seen from the following table.

This table shows for the years 1903-1911 the prices obtained in Eng-

land by the *Tröndelagen smörexportforening* (the largest of these co-operative societies) as compared with the maximum prices of the Copenhagen list, which, as is well known, is the principal centre of butter supply to the English market :

Year	Number of barrels sold (of 51 kilos each)	Maximum price per kg. acoording to Copenhagen price list	Price per kg. obtained by the co-operative society (kroner)	Difference above or below (öre)
1903–04	3,220	1.87	1.82	— 5
1904–05	4,200	—	—	— 6
1905–06	4,700	1.937	1.89	— 4.75
1906–07	4,400	1.975	1.928	— 4.55
1907–08	4,684	2.008	1.963	— 4.50
1908–09	4,817	1.956	1.919	— 3.60
1909–10	4,550	2.037	2.017	— 2.00
1910–11	3,426	2.040	2.033	— 0.50
1911–12	5,207	2.19	2.20	+ 1.00

By intelligent and assiduous work, giving special attention to improvement of the quality of the goods and the packing, the societies have, in the last year for which information is to hand, succeeded in securing prices still higher even than those obtained by the Danish producers ; in any case, the differences below preceding years are negligible.

The four societies for which particulars are available, sell annually about 700,000 kilos of butter of an aggregate value of about 1 ½ million kroner, at the average price of 2.19 kroner per kilo.

B. — *Co-operative Societies for the Sale of Eggs.*

In this department likewise Norway ranks after Denmark, which is the great exporter of eggs to England. The position has however much improved since the co-operative societies developed. There are 31 such societies, mostly established in the northern part of the country, but the data in reference to membership and balance sheet figures are known only for 22. It appears that in 1912 the membership amounted to 1630, and the number of hens belonging to the members to 35,686 ; the eggs delivered amounted to 252,824 kilogrammes ; and the turnover attained 298,017 kroner. In all it may be calculated that the societies sell about 350 thousand kroner worth of eggs per annum.

The number of these societies is relatively small, because the production of eggs has not yet assumed large proportions, and therefore producers

have up to now been able to dispose of their products with facility at advantageous prices.

With a view to sketching in brief outline the organisation of this society, we reproduce here some provisions from the bye-laws of the Romsdal co-operative society, one of the most important in the branch.

The object of this society is to provide for its own members a remunerative market for eggs and other poultry products ; to promote and improve the breeding of poultry, and, by means of direct purchases, to supply breeders with the best breeding animals and all other requisites for this business.

The "*egg sale circles*" (*eggsalgskredsene*) are members of the society; they are local bodies made up in their turn of the individual producers. The producers pay an entrance fee of 50 öre and 5 öre for each hen possessed; the circles pay the societies an entrance fee of 50 öre per member. Each circle must possess at least 100 hens. It is bound to deliver its entire production to the society. The eggs must be fresh and clean. They are numbered and the stamp of the circle is affixed on each. For each egg which cannot be used, i.e. which is not fresh or is dirty, the producer pays a fine of 25 öre and, in case of recurrence, may be expelled. The delivery of the eggs is made every 8 days from the 15th April to the 15th July, and every 15 days during the rest of the year. Payment for the eggs to the producer is made by weight, every 15 days, but always 1 month after date.

The general meeting is formed of the representatives of the circles, one per circle; the direction of 5 members, 3 elected by the representatives, 1 by the agricultural society (*landhusholdnigsselskapet*) and the other by the *fogderi* (*fogderiforening*) (1).

C. — *Co-operative Societies for sale of Wood.*

These societies are organisations of very recent origin, created quite during the last few years. They are a particular advantage to small owners of wooded land, who by their aid sell their wood on the same advantageous terms as large forest owners. The society sorts out the various qualities of wood and succeeds in effecting the sale of large quantities of uniform merchandise bearing the stamp of the society and therefore guaranteed, at the most advantageous possible prices. In addition however to handling the individual output of their members, the co-operative societies also aim at encouraging more rational cultivation of forest in the interests of national economy and safeguarding the collective interest of the producers in every other direction.

At the end of 1913 there were 73 co-operative societies, 50 of which had combined into 4 large associations: the "*Mjosdistrikternes skobgseier-*

(1) *Fogderi* is the district placed under a *Fogd*, an official with administrative and judicial powers.

forening comprising 20 societies with an annual sale of about 900,000 kroner ; the *Drammensdistriktets forening*, with about 700 members, and an annual sale of 1,710,000 kroner ; the *Nedre Vest-Telemarkens skogseierforening* formed by 4 co-operative societies, with about 130,000 kroner of sales, and the *Indherreds skogseierforening* which only sells 3 000 kroner worth of wood, produced by 9 co-operative societies.

The membership of 43 co-operative societies was 1620 in 1913 ; the area of forest, belonging to 23 co-operative societies was 1,509,500 *maal* (1) and the total sale of all the societies amounted approximately to kroner 2,824,430 per year.

From the Bye-laws of the Associations it appears that these do not carry out the sale direct for the individual societies, but confine themselves to the function of regulating and directing production. They fix the minimum selling prices and inform the sections as to the conditions of the market ; they may restrict the felling of the forest belonging to their members and are always kept advised by the latter as to the quantities of wood available ; they endeavour to act in concert with the other associations and are bound to give advice and assistance to the individual societies. The latter, in turn, do not as a rule make it obligatory on each member to deliver all his production to the society, but endeavour to secure that the sale should only take place through the latter, and that the member should in no case conclude a sale before conferring with the management of the society. The member must, before the 1st November in each year, communicate in writing the quantities and qualities of wood which he proposes to sell. From the annual sale of each purchaser 5 % is set aside and deposited with a bank in order to be used for the improvement of forest cultivation on his property.

Each forest owner of the provinces may become a member. Each member pays a contribution proportional to the area of his forest.

D. — *Co-operative Societies for the Collective Sale of every Description of Agricultural Products.*

These societies, in contrast to those examined above, do not specialise in any individual product but undertake the disposal of the entire agricultural production of their members.

There are 3 in existence in Norway founded between 1912 and 1913. In view of the short space of time which has elapsed since their origin it is not yet possible to form an exact idea of the economic results obtained.

The most usual articles which they undertake to sell are bacon, eggs, potatoes, herbs, fruit, etc.

The farmers are for the most part not under obligation to deliver all their products to the society, but in practice this rule is followed everywhere.

(1) One *maal* is equal to about 9.83 ares.

They must, however, undertake to remain members for a fixed number of years, generally five. The associations also undertake the sale of the produce to non-member farmers. The organisation of these societies likewise provides for the establishment of sales departments in cities. The expenses are met by means of the members contributions.

The most interesting of these societies is that known as the " *Bondernes Faellessalg* ", formed of small farmers residing in every part of Norway, so that, in contrast to other co-operative societies, it is not of a local character at all. It represents the first step towards a general co-operative society of all the Norwegian agriculturists.

It was founded in 1912 with a capital of more than 150 thousand kroner, and with about 9,000 members scattered throughout the country. In the first 14 months of operation the sales attained 1,400,000 kroner, or about 100,000 kroner per month. The members are not bound to deliver their production. Other particulars in relation to these interesting co-operative bodies are not yet at our disposal.

E. — *Co-operative City Milk Supply Societies.*

These associations likewise represent the latest outcome of Norwegian co-operation. Two have been founded, one supplying milk to Christiania and the other to Bergen; both only began operations in 1913. It is interesting to recall how the formation of the first came about. Originally the co-operative dairies sold their milk readily to the dealers and concluded contracts with carriers to convey the goods from the railway to the businesses. Little by little these carriers began to buy the milk from the dairies and sell it to the dealers, thus forming a new class of intermediaries. In 1908 there were in Christiania 45 of these wholesalers who, under the spur of competition, continued opening new milk shops. In Christiania indeed the milk shops which in 1908 numbered 1045 had risen to 1075 in 1911. The increase of business necessarily led to an increase in the cost of sale of the milk. That is why in 1908 the producers received öre 9.5 per litre of milk which was afterwards sold readily at 16-17 öre ; and in 1911 the prices were 10.5 and 18-19 öre respectively (1). It will be readily understood that under such circumstances the idea arose of getting rid of the intermediaries and undertaking the collective and direct sale of the goods.

After various attempts a co-operative society for the sale of milk in Christiania was formed with a capital of 500,000 kroner, divided into quotas of 200 kroner each, corresponding to 10,000 litres of milk.

The society now comprises about 70 dairies which dispose of 31 to 32 million litres of output of milk per annum. It distributes about 8 million litres (or one fifth of the annual consumption of the capital) to the con-

(1) An endeavour made by individual cow-keepers to forward their milk direct, without passing through the dairies' hands, had yielded the same result.

sumers direct, and the remainder through intermediaries. The goods arrive by railway from the places of production which are at distances of 80 kilometres (in one case 120 kilometres) from the city.

Many of the dairies originally devoted themselves to the manufacture of butter and cheese as they had not found it expedient to sell milk, but in proportion as the consumption of this latter food grew and new railways were built, they undertook the sale of the product in the natural state, swelling the ranks of the co-operative societies.

Owing to the short time the society has been in existence in Christiania no figures as to its turnover can be adduced. It is merely known that the installation of the great central building in Christiania, fitted up with the most up-to-date improvements in the dairy industry, cost nearly 1 million kroner.

§ 5. Consumers' societies.

The first of these co-operative societies was founded in 1866 and was straightway followed by many others, all welcomed by the public, which beheld in them the most effective means for amelioration of the economic position of the lower classes.

Unfortunately the beginnings were not very auspicious, because, particularly on account of the inexperience of the founders and the excessive credit allowed to members, many societies came to an abrupt end. A reaction followed in the shape of a wave of mistrust which hindered all further progress.

On towards the beginning of this century the striking results secured abroad and the prosperity of some of the Norwegian societies, which, being better administered, had been able to keep themselves going, caused a recrudescence of favour with the public, which understood that the failures had been due rather to a bad application of principles than to any want of correctness of the principles themselves.

During the last few years progress has been rapid, as appears from the following figures for 1910.

Co-operative Societies	Number	Those which made known their membership	Membership	Those which communicated their turnover	Turnover — kroner
In the rural communes	325	224	27,352	225	13,479,977
» urban »	45	28	13,024	28	5,064,588
Total . . .	370	252	40,376	253	18,544,565

The major part of the societies are situate, as will be seen, in the rural districts ; the city societies are however proportionally much richer in numbers, averaging 290 members per society, while the rural do not exceed an average of 85 members. Still the latter have an average business turnover per member in excess of the former ; namely 492 as compared with 388 kroner.

There are appended some further particulars taken from the balance sheets of 63 agricultural co-operative societies of consumers for the year 1912.

Membership	Number of employees	Aggregate turnover — Kroner	Gross income — Kroner	Net income — Kroner
21,208	440 including 221 women	7,402,100	1,089,500	501,200

The expenses represent about 7.9 % of the aggregate turnover, and amount to 588,300 kroner, of which 353,000 are distributed to employees in the shape of wages and profit sharing.

Of the net income about 75.5 % (or kroner 378,600) is given to the members in the form of allowances on purchases, and the balance goes to the reserve and redemption fund.

The assets and liabilities are distributed as follows :

ASSETS — 1st January 1913.

Depreciation and redemption — Kroner	Real Property — Kroner	Personalty and cash — Kroner	Goods — Kroner	Negotiable instruments — Kroner	Outstanding claims — Kroner	Sundry — Kroner	Total — Kroner
234,100	429,000	120,100	924,700	98,190	202,600	17,000	2,025,600

LIABILITIES — 1st January 1913.

Shares	Reserve Fund — Kroner	Mortgage debts — Kroner	Advances taken on goods — Kroner	Other debts — Kroner	Brought Forward — Kroner	Total — Kroner
354,300	375,300	260,300	559,300	67,500	408,900	2,025,600

To complete these brief notes on co-operative societies of consumers a few particulars may be added in reference to the *Norges Kooperative lands forening* (Union of Agricultural co-operative Societies of Norway) which groups about 150 societies of this kind into a single organisation.

It arose in 1906, with the object of promoting the economic development of the combined societies by means of collective purchases and joint production.

In the department of production the Union has, up to now, confined itself to the manufacture of margarine. In 1914 however it also owned a tobacco factory.

In 1912 the Union bought the building in which it is housed.

It also issues a periodical called " The Co-operator " and, by publications and lectures, keeps the movement in favour of co-operation alive throughout the country.

Following the example of similar Danish institutions, it established in 1911 a special savings department for its own members, which found great favour.

This emerges from the following table, from which the rapid growth of the Union is also evident.

Year	Number of affiliated societies	Number of members	Annual balance — Kroner	Special particulars of Savings department		
				Number of Societies	Number of depositors	Deposits — Kroner
1907	22	7,000	182,471	—	—	—
1908	28	—	615,015	—	—	—
1909	41	9,000	643,631	—	—	—
1910	57	12,000	958,827	—	—	—
1911	75	15,000	1,233,843	21	1,068	35,723
1912	117	20,000	1,954,295	34	2,664	189,490
1913	142	22,000	2,437,066	37	3,566	302,948

In seven years the number of affiliated societies has increased sevenfold ; the membership has been multiplied by three and the turnover by twelve ; equally flourishing is the savings department, in which, in three years, the number of the societies has doubled, that of the depositors has increased three-fold and the amount of the deposits has multiplied twelvefold.

A few words as to the organisation of the Union.

Membership is open to any co-operative society which makes application and satisfies the specified conditions. These conditions include the payment of a contribution of at least 100 kroner for every twenty members

who, during the past year, have purchased to a value of 50 kroner at least, and the obligation to increase the subscriptions in proportion as the membership grows. The affiliated societies are only liable for the amount of their contributions. They must send their yearly accounts regularly to the Union, and reply to all the questions which the latter may address to them.

All sales are at wholesale prices and for cash that is, for payment within thirty days after despatch of the goods. From the net receipts 5% is deducted to pay interest on the contributions of the societies ; the remainder is divided among the societies in proportion to the purchases made from the Union. Losses, if any, are covered out of the guarantee fund, or, if that is not sufficient, out of the reserve fund of the individual societies in proportion to the contribution for which they are liable.

For the publication of the periodical " The Co-operator " each society must pay 10 öre per member quarterly in advance. The paper is forwarded to all the members direct. It is managed by a committee. The discussion of all problems relating to co-operation is free, but the policy of the paper must be in keeping with the principles of co-operation and the resolutions of the general meeting.

The latter is the sovereign governor of the Union, and consists of the representatives of the societies in the proportion of one per 200 members of the societies. The meeting elects the management consisting of seven members, which in practice is the central functioning body, as it makes all purchases and sales and carries the resolutions of the meeting into effect (1).

§ 6. The farmers' house.

In conclusion mention may be made of an original institution connected with the agricultural co-operative movement, which is the so-called " Peasants' House " erected in Christiania by a society founded in 1911, formed by the Association for the welfare of Norway (*Selskapet for Norges Vel*) and various agricultural co-operative societies, with the object of providing agricultural institutes and the agricultural Youths' Association with good and commodious premises, at the lowest possible prices.

(1) From the issue for April 1916 of the " Bulletin coopératif international " we take this further information for 1915, with regard to the Union. The margarine factory and tobacco factory show an increase of 40 % in the business done. The Banking department, which in 1914 had at its disposal a sum of 347,000 kroner, in 1915 turned over 545,000 kroner. Thirty new co-operative societies have affiliated with 2,500 members. The journal " The Co-operator " has reached a circulation of 25,000 copies. The contribution of each society has been ncreased from 100 to 150 kroner for each 20 members. Furthermore, a special secretariate has been formed for propaganda and education work. Different important schemes are under study for 1916, among them the formation of a fund for pensions to employees. The " Bulletin " likewise records the fact mentioned at the end of this article, of the tendency to amalgamation among the different co-operative societies.

The building, completed in 1913, cost 1,200,000 kroner and produces an annual rent of 96,000 kroner. It is partly occupied by the share-holding associations themselves, and partly let to private persons. It also contains the so-called " Agricultural Exchange " intended for farmers who wish to meet and transact their business there. There is likewise a room for lectures on agricultural and co-operative propaganda and a hotel for farmers temporarily in the capital.

§ 7. The co-operation committee.

It must be finally noted that in order to make co-operative principles better known and appreciated throughout the country, the Association for the Welfare of Norway elected in 1910 a co-operation Committee which has performed very effective work in favour of agricultural co-operation, chiefly by means of lectures throughout the country and also publications. During 1911-1913 300 lectures were given in town and country with good results. The Committee also pressed the agricultural schools to arrange for special courses in co-operation, and by way of example started one for its own account in Christiania in March 1913.

In addition the Committee in general affords its aid free of charge in favour of any co-operative institute, apparently with good results.

This brief account of the Norwegian co-operative movement shows that, in spite of the great difficulties placed in the way by nature and by the special character of Norwegian agriculture and farming, agricultural co-operation from the early years of this century onwards, has shown great development.

Particularly noteworthy is the tendency towards federation among the various co-operative societies in each field of their activity, so that they form complex and powerful co-operative organisms which in their turn contribute in a great degree to the expansion of the agricultural economy of the country.

Although in this matter Norway has not reached the same level as Sweden and in particular Denmark, nevertheless the reawakening which has occurred of late years is so promising that it presages a brilliant future for co-operation in that country likewise.

RUSSIA.

AGRICULTURAL CO-OPERATION IN SIBERIA (*DAIRY ARTELS*)

(*According to a recent publication*).

The *International Review of Agricultural Economics* has already, though within somewhat narrow limits, dealt with the dairy societies (co-operative societies for the manufacture of butter) in Siberia in its issue for May 1911, and, in that for August 1914, with the *Union of Dairy "Artels"* in Siberia.

We now find new and more extensive data on this important matter in a book of recent publication, and we avail ourselves of this to sketch out here in main outline a picture of the development of agricultural co-operation in Siberia during latter years (1).

Co-operation in Siberia arose above all with a view to improving the trade in and production and export of two of the greatest agricultural products of that rich region : grain and butter, along with some products of the cheese industry. Side by side with this class of co-operative societies there afterwards sprang up the societies of consumers, which institution was called forth by the fact of organisation of production and trade in dairy products.

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It is certain that the problem of the exportation of Siberian grain is likewise conditional upon a better organisation of trade. Siberian farmers have endeavoured to provide for this by combining in co-operative associations. Recently various Siberian co-operative societies took the initiative of building elevators for grain which would allow of keeping a proportion of the grain until the proper time for putting it on the market.

The societies dealing with this class of business, on receipt of the grain, pay a sum on account to the members, so that the latter in the autumn when the period of payments comes are not under the necessity of selling

(1) JENNY GRIZIOTTI-KRETSCHMANN: "*La colonizzazione della Siberia*" (*Colonisation in Siberia*). Rome, Athenaeum, 1915, pp. 183.

their grain at any price. The payment on account made to peasants is fixed weekly on the basis of the price lists of local exchanges.

When the prices of grain are low, the payment may amount to 78 % of the value of the grain, but with high prices it cannot exceed 60 %. The dairy societies also at present adopt this system and organise deposits of grain against payment on account, promoting the exportation of the grain abroad. To facilitate payment of these sums on account to the grain growers, the dairy societies have been granted a credit in the State Bank.

With the growth of agriculture and of cattle rearing, and likewise the increase in the production of milk and its derivative products, the peasants of Siberia felt the need for organising the trade and exportation of butter through dairy societies known as dairy « Artels », for the foundation of which recourse was had to the assistance of specialists sent by the Government. The basis of the co-operative society is the obligation : 1) to supply the whole of the milk to the society on pain of fine in the event of infringement ; 2) to be jointly and severally liable for the obligations undertaken by the society. At the time of formation of the society the individual members pay in sums in proportion to the number of cows they possess (4 to 5 francs per cow) ; those who are unable to pay cash supply milk to a corresponding amount.

The business is managed by a general meeting of the members, each one of whom is entitled to a single vote no matter what number of animals he owns. The meeting appoints a technical manager and a managing director who is responsible for the cash and accounts of the society ; he selects the staff, purchases material and plant, attends to the sale of the butter, etc. The distribution of the profits is proportional to the quantity of milk supplied.

The struggle begun by these co-operative societies with the individual companies of private speculators has resulted in the victory of the organised peasants, because in the department of the technical art of production and rational hygiene they surpassed the private companies, the latter paying little heed to all those matters which were outside the scope of pure and petty speculation. The true and great development of co-operative societies begins in 1902, when Balakshin, who placed himself at the head of the co-operative movement, was, after a memorial submitted to the Russian Ministry of Agriculture on the « measures for the development and success of the dairy industry in Siberia », given authority and credit by the Government for an ampler organisation of the co-operative societies and the technical improvement of butter production. On the initiative of the same Alexander Nikolaievitch Bakakshin a society was formed « for the organisation of co-operative dairies in Western Siberia », which was in 1907 already joined by 271 butter producing societies (dairy Artels on a co-operative basis) with 52,000 peasant farm properties.

Originally the societies furnished the butter produced by them to export firms with whom they made annual contracts, which however were not always of advantage to the firm, above all when the production of butter increased and the price declined during the year. In these cases the firms cancelled the contracts by paying small fines, which were very little as com-

pared with the loss sustained by the dairies when the price of butter went up a great deal.

All these conditions formed an incentive towards a genuine organisation. In 1901 consequently there was established at Kurgan a Society of farmers consisting of 33 members, of which 5 were dairies, having for its object the exportation of butter. In 1903 the dairies forming part of the Society numbered 29 and the butter supplied by it represented 37 % of the total butter exported. Another similar Society had been formed in the province of Tomsk.

All this however represented only a transitory form.

In 1908 the Society founded by Balakshin was converted into the " Federation of Siberian Dairy Artels."

The region over which this Federation extends its activity covers about one million square versts. The Artels forming part of the Federation are founded on the following bases : 1) mutual liability in reference to obligations assumed ; 2) joint administration for current business ; 3) entrance payment for each member on the basis of the number of cows be possesses ; 4) fine of 5 roubles for each cow if the milk is sold elsewhere ; 5) penalty for adulteration of the butter ; 5) withdrawal from an « Artel » can only be allowed in consequence of change of abode ; if the member leaves for other reasons he is not entitled to receive any portion of the capital nor is he released from the joint liability for the debts assumed by the Artel up to the date of withdrawal of the member ; 7) the Artel can carry out other business, such as found associations of consumers from whom the members of the dairy Artels are bound to make their purchases.

By these associations of consumers the Artels have struck a blow at private merchants, who sold to the peasants at usurious prices goods which were often decayed, taking advantage of the need of the peasants to buy on credit at difficult times.

The said associations are supplied direct by means of a big goods depot founded at Kurgan ; they at once underwent great expansion in view of the real advantages which they offer and their practical utility.

The profit which they endeavour to make is very small and is limited to the formation of the foundation capital ; when this object is achieved the annual profit is subdivided among the members in proportion to the quantity of goods purchased.

The goods are likewise sold on credit for a sum not exceeding the value of the milk to be delivered within one month to the Artel.

The Artels have formed very many other undertakings : co-operative mills, abattoirs, industries for the manufactures of clothing and boots. They have latterly also begun to establish cheese-making industries, and at present they turn out several thousand poods of a kind of cheese which finds a sale in England.

As was observed, the Artels also engage in the construction of co-operative elevators for grain keeping and organise its export abroad.

Coming back, after this digression on the subject of consumers societies formed by the dairy Artels, to the Federation of these Artels, we observe

that it consisted in the first place of only 12 societies with 21,000 roubles capital. As early as 1912 however the Federation comprised 328 Artels and 170 consumers' societies, which rose again in 1914 to 563 Artels (of whom 235 had joined in 1913) and 502 consumers' societies, which latter showed a turnover of 14,066,251 roubles, as against 7.5 millions in 1912. The net profit was 56,683 roubles.

The Federation of Siberian Dairy Artels is governed by bye-laws which are signed by all the members at the time of entrance. Each Artel pays an entrance fee of 10 roubles and purchases one or more shares of 100 roubles each. All the butter turned out by the Artels must be delivered to the Federation and from the latter there must be bought all the materials and goods which it can supply to the members. The Artels are liable for the obligations contracted by the Federation to the extent of 50 copecks for each pood of butter conveyed to the Federation. The business is managed by a Board of three members, and the general meeting of the delegates of the Artels. All resolutions must be adopted unanimously.

Let us now see how the sale of co-operative butter is organised.

The dairy societies of Siberia when formed already found a remunerative export trade in existence which had been set going chiefly through foreign private birms. Denmark was the first country to import Siberian butter. A Danish dealer, one Pallisen, in 1896 formed the first business for the exportation of butter ; two years later, in 1898, Pallisen had established 8 of these businesses and 90 % of all the butter exported was in his hands and was forwarded to Denmark.

Later on Germany and England began to buy the butter for their own account. In any case the most important market for Siberian butter is England, where in 1909 there were imported 1,546,000 poods of butter of a value of 22,218,000 roubles ; in the same years the importation into Germany was 1,100,000 poods, for 15,225,000 roubles. The exports to Denmark in 1909 totalled 700,000 poods, for 9,489,000 roubles. The export trade having become a monopoly of foreign firms, the Artels found themselves too much tied down by the interests of these firms, and necessarily thought of freeing themselves. Yet in the very first years of its existence the Federation, with a view to eliminating private intermediaries, put itself into communication with English firms which were to take Siberian butter and pay the local price for it ; the contract was however afterwards so modified that the firm was to pay a part of the consideration on the basis of the Siberian price, the balance being taken on commission and the profits and losses divided in moieties with the Federation. Business however did not proceed with the desired results.

Finally in 1912 the Federation founded in London a share company under the style of "*The Union of the Siberian Co-operative Associations*" with a share capital of 1 million roubles. The shares are of two kinds: 100,000 6 % paid up preference shares and 100,000 ordinary shares not paid up of a nominal value of 50 roubles and which according to English law conferred the right of intervening in the business of the company. The

paid up shares are in equal portions in the hands of the two Russian directors and the two English directors of the Union.

The London Union receives on commission the butter from the Siberian Artels ; as regards payment the Union, straightway on receipt of the butter, remits to the Federation 90 % of the price of the butter as it appears in the foreign market ; the balance is paid after sale has been effected and after interest has been taken off for remuneration on the capital of the company to the amount of 6 %, and also a contribution of 2.5 % to the expenses of the Union offices abroad and at Windau, and about 2.25 roubles per pood to cover the costs of carriage, delivery and insurance.

The greater portion of the traffic passed through the ports of Riga and Revel, but at present the principal ports of export are Windau and Petrograd owing to the opening of the Ekaterinburg-Perm Northern Railway which is about 250 versts shorter than the line first used.

The exportation is carried on particularly during the so-called butter season which lasts from the 1-14 April to the 1-14 November, twice a day in special cold storage carriages. Out of a total of 4,310,126 poods of butter exported to Europe by Siberia in 1911, there were exported from the principal centres during the butter season 3,329,292 poods of a value of 46,924,186 roubles ; during the other months, on the other hand, from the same locality there were sent out 980,000 poods of butter of a total value of 14,919,933 roubles. In 1912 the butter exported from Siberia rose to 4,525,000 poods, and in 1913 to 4,870,727 poods.

Let us now see to what extent the Siberian Artels contribute to reaching these striking figures.

In 1910 there were sold 253,854 poods of butter by the Federation of Siberian Artels and 15,548 by the unfederated Artels. The members of the Federation received 59 copecks per pood of milk, and the turnover amounted to above 4 million roubles. In 1911, in spite of the year of bad output, there were exported 187,000 poods of butter of the Federation and 94,000 poods of the other Artels ; the turnover was 4.6 million roubles, and the milk fetched 61 copecks per pood.

In 1912 the Federation exported 449,329 poods and 28,000 poods were exported by the unfederated Artels ; the turnover rose to 7.5 million roubles.

The net profit was 33,800 roubles and the members realised 64.5 copecks per pood of milk. The capital of the Federation in that year amounted to 86,000 roubles.

In December 1913 the Siberian Artels counted 120,000 members owning 300,000 cows ; the butter sales of the Federation exceeded 6 million roubles, and in the sales 300,000 roubles more were realised as compared with Siberian prices. There broke away from the "Federation of Siberian Dairy Artels" in 1911 the "*Federation of Dairy Artels of the Ural Region.*" This Federation, in addition to the butter business, undertakes the purchase of grain for its own members. At the end of July 1911 the Federation in question had purchased 9,000 poods of seed rye and about 20,000 poods of rye flour which were sold to the members of the Artels at 1 rouble 15 co-

pecks per pood, while the prices on the market were 1 rouble 30 copecks. The Federation has also executed a contract with the State for the transportation and preservation of grain for army supplies, being able to undertake this engagement owing to its having 4 elevators at its disposal. At the 1st January 1913 the Federation of Dairy Artels of the Ural Region already numbered 121 Artels. The business in one and a half years totalled 9 ½ million roubles.

Among the organisations for the sale of butter there should also be mentioned the *"Commercial Branch of the Agricultural Society"* at Vologda, which in 1911 sold abroad 23 % of the total quantity of its butter.

Finally it should be noted that in addition to the Artels there are in Siberia very many private undertakings for the production of butter; in 1910 they numbered fully 1424 businesses. The total production of butter in private industry exceeds by a small amount that of the Artels.

MISCELLANEOUS INFORMATION RELATING TO CO-OPERATION AND ASSOCIATION IN VARIOUS COUNTRIES.

CHILE.

FORMATION OF TWO GROWERS' ASSOCIATIONS IN CHILE. Boletín de la Sociedad Nacional de Agricultura. Santiago, Vol. XLV, Nos. 2 and 4.

Vine and fruit growers in Chile have recently, under the auspices of the National Society of Agriculture, formed two Associations the object of which is to defend the interests of the wine-producing and fruit trade industry respectively.

The bye-laws and regulations of these two groups (the Association of Chilian vine-growers and the Society of Chilian fruit-growers) furnish a clear idea of what these two classes of growers feel to be needed.

Association of Chilian Vine-growers. — The climate of a fairly large portion of Chile is admirably adapted for the cultivation of the vine, which cultivation is capable of much greater extension. According to the statistics of 1910 the production of wine and alcohol in the principal countries of Latin America and in California was represented by the following figures:

Chile	4,256,000	hectolitres
Argentina	3,960,000	"
California	1,800,000	"
Brazil	300,000	"
Uruguay	160,000	"
Peru	100,000	"
Bolivia	30,000	"
Mexico	12,000	"

As will be seen, the production of Chile but little exceeds that of Argentina, although the latter only started vine-growing a few years ago. The stagnation in this branch of agricultural activity in Chile is due to two main causes, want of solidarity among growers and insufficiency of exports.

As early as 1874 it was proposed to group wine-producers into a society in order to remedy a state of things from which the country was already suffering, but is was not until 1914 that the plan was carried into effect, thanks to the energetic popaganda carried on of late years for developing the spirit of association.

The Society, which is located at Santiago, has the following objects : (*a*) to encourage the exportation of wine, champagne brandy and alcohol ; (*b*) to exercise careful supervision with regard to wine adulteration with a view to punishing the offenders ; (*c*) to defend the general interests of the wine industry. The funds of the Society are made up : (1) of 50 % of the exportation premiums granted to vine-growers under the present laws ; (2) of the subsidies allocated by these same laws to promote wine exports ; (3) of entrance fees ; (4) of the ordinary and extraordinary subscriptions which may be fixed by the general meeting. The entrance fees are fixed as follows : 2000 pesos for members exporting wines to be sold under their brand in bottles, demi-johns or casks ; 1000 pesos for those exporting wine to be sold in casks exclusively ; 500 pesos for those who simply desire to promote the exportation of wine without taking it in hand direct. Furthermore the members must pay the Society 1 % of the net price of the wine sold by them abroad.

The sums at the disposal of the Society are employed in principle as follows : 60 % for the study and organisation of propaganda work and agencies abroad ; 25 % for the formation of a reserve fund and 15 % for costs of management.

The Association is managed by a committee of 11 members comprising 9 owners and 2 deputies. It also has an expert commission of 3 members. which is called upon to judge by analysis and taste the quality of the wine intended for export.

Membership of the Association is limited to the owners or tenants of vineyards and wine-cellar owners. The members bind themselves, on pain of forfeiture of all contributions and entrance fees, not to sell their wine on foreign markets directly or indirectly otherwise than in accordance with the bye-laws and regulations. When a member wishes to export wine, he must make application to the President of the Association, specifying the class of wine, quantity, market for which intended, price required, nature and quality of containers. The President then has samples taken ; and if the experts find the wine to be good, its exportation is authorised but forwarding may not take place until the identity between the samples analysed and the consignment is established. Finally, in order to facilitate commercial operations, wines in cask must approximate as far as possible to the different types fixed by the managing committee, for each of which the price is also determined by the committee.

The Association may also act as intermediary for the sale of wines among the members or between the latter and third parties. The former must pay a commission of 1 % on the aggregate amount of the sale, and the latter a commission of 2 %.

Fruit-growers' Society of Chile. In 1914 likewise the foundations were laid of the Association of Fruit-growers of Chile, formed for a period of 30 years capable of extension.

The object aimed at by this Society is to promote the exportation of fruit, fresh, dried or preserved, and to foster the creation and maintenance of fruit-markets designed on hygienic principles in the capital and the principal towns of the Republic ; to open up markets abroad by selling fruit for account of its shareholders or for its own account ; to carry out studies and investigations in the interests of members, and give them practical instruction through a competent technical staff in all branches of the fruit industry ; to protect the general interests of fruit-growing and the fruit trade, and give its shareholders every other facility or aid which the management may deem desirable for developing and encouraging this form of activity ; to carry out all transactions relating to the growing, purchase and sale of fruit.

The capital of the Soociety is pesos 150,000 divided into 300 shares of 500 pesos ; it may be increased to 1 million pesos by resolution of the general meeting. One half of the amount of shares must be paid on subscription, and the balance when calls are made by the management. The shares are transferable ; but the transferee must be approved by the management. Fruit-growers alone are admitted to membership, and none of them may possess more than five shares. The Society may grant advances of funds to its shareholders on their fruit crop, against reliable security. It is managed by a directing committee consisting of five members elected for one year by the general meeting. The meeting meets in the ordinary course twice a year, in January and July ; shareholders are entitled to one vote per share, and may be represented by a proxy, but one and the same person cannot represent more than ten shares by proxy. The distribution of the half-yearly profits is as follows: 10 % to the reserve fund until it reaches 50 % of the capital ; 10 % to the directing committee ; 10 % to the President ; 15 % to the manager and the employees, in proportion to their salaries ; and 55 % to the shareholders.

The Society must call in the services of an expert in fruit-packing and a thoroughly competent staff to teach the best methods to be employed ; it will concentrate the production of fruit and undertake its packing and forwarding, and also exportation. If its means allow, it may grant loans to growers who are members up to 50 % of the value of the fruit exported.

It may, on the other hand, buy fruits direct from third parties and sell them for its own account.

As Chilian legislation does not allow of the formation of co-operative associations, the Society of Fruit-growers of Chile has taken the form of a limited company.

UNITED STATES.

RURAL CREDIT BILL PASSED IN THE SENATE. — *The American building associations news*, Cincinnati, May 1916.

The Hollis farm loan bill, embodying the administration plan for establishing a system of rural credits was passed in the Senate, after almost two weeks of debate, by a vote of 58 to 5.

A similar bill has been reported by the House banking committee, and will be brought up for consideration soon. Like the Senate measure, it would create a chain of farm loan banks but it differs in method of operation.

The Senate bill provides for a non-partisan farm loan board, to consist of the Secretary of the Treasury and four others, having general control of a farm loan system of twelve or more land banks and of farm loan associations, through which loans actually would be made.

Each land bank would have a capital stock of at least $500.000 to be subscribed by the gouvernment if not taken by the public.

The farm loan associations would be co-operative, made up of ten or more farmers, who would obtain a charter from their district land bank. A farmer desiring to become a borrower would be required to take stock in the loan association equal to 5 per cent of his loan, and the association in turn would take an equal amount of stock in the land bank.

On mortgages amounting to $50.000, a bank might issue a like amount of farm loan bonds, which would be secured by all twelve land banks.

All profits would go to the loan associations in dividends and thus to the borrowers who are shareholders in them.

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FOUNDATION OF A NATIONAL AGRICULTURAL SOCIETY. — *The Economic World*, New York, May 6, 1916.

The thing has just been carried into effect (end of April) but the idea had been in the air for more than a year. A few words will, after the speech pronounced, by the President, the Hon. James Wilson, in the discussion on the object of the said Society, suffice to indicate what this new organisation is intended to effect. The national idea is gaining more and more ground in the United States ; and the same is the case with the idea of co-operation. It is realised more and more that union is strength. The Society in question is meant to ensure the welfare of the individual, both in

the small and large agricultural unit, by means of co-operation, for the greatness of the nation. In order to do this, it will try to be the same thing for agriculture as the United States Chamber of Commerce is for the business world.

FRANCE.

AN EXPERIMENT BY THE MECHANICAL CULTIVATION UNION. — *Comptes rendus des séances de l'Académie d'Agriculture de France.* Sitting of July 5, 1916.

A mechanical cultivation union has been created in the communes of Sencenac-Puy-de-Fourches, near Brantôme, under the patronage of the Perigord group of the Society of Agriculturists of France, the Society for the Promotion of Agriculture in Dordogne, and the Association of Agricultural Unions. The region in which it operates has a shallow clay and limestone soil, with gentle slopes. The fields, which were formerly of small extent, have been re-striped, and the Association is directed by a member of the Council of the Association of Unions of Perigord, which works part of these properties.

This Association has had a subsidy of 1,500 francs from the Society of Agriculturists of France and one of 4,000 francs from the Ministry of Agriculture ; it began to operate in the course of last winter.

The tractor is of 25 HP.

The experiments carried out show that a mechanical cultivation Union can render service in a country of medium-sized farms, but that it is requisite not to work fields below 200 metres. The latter are rare in small farm districts, above all in broken country. Therefore although the extension of mechanical cultivation is highly desirable and calculated to promote utilisation of the soil, it would be a mistake to think that in hilly parts or small farm localities resort could be had to such a system until a light flexible motor with narrow wheel-gauge has been devised.

GREAT BRITAIN AND IRELAND.

SMALL HOLDINGS AND ALLOTMENTS SOCIETIES IN 1914. — *The Board of Trade Labour Gazette ;* April 1916.

In the year 1914 there were at work 147 co-operative small holdings and allotments societies, with a total membership of 16,205, compared with 131 societies and 14,471 members in 1913. Their total capital was

£ 49.665, consisting of £ 11,818 in shares, £ 33,308 in loans, and £ 4,539 in reserve funds.

These societies held 15,432 acres of land, for which £ 26,657 was payable by them for rent, rates and taxes; 15,017 acres were let to 12,234 tenants, who paid £ 31,139 to the societies for rent, rates and taxes. A number of the societies have formed trading departments for the purchase of members' requirements and for the sale of their produce. The total sales by the societies amounted to £ 3,471 and the net result of the operations of the whole of the societies in 1914 was a profit of £ 215.

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CO-OPERATIVE USE OF MOTOR PLOUGH BY PINVIN AGRICULTURAL CO-OPERATIVE SOCIETY. — *The Journal of the Board of Agriculture.* London, June 1916.

A good example of what may be done in the way of purchasing implements co-operatively is afforded by the Agricultural Co-operative Society at Pinvin, in Worcestershire. Last year, owing to the scarcity of labour and horses and the increase in the number of small holdings in the district, the members of the Society found it almost impossible to get their ploughing done by neighbouring farmers as in the past. The Society decided therefore, to take steps to purchase a Wyles motor plough to be used co-operatively by the members, and approached the Worcestershire County Council with a view to obtaining a loan of £ 175 for the purchase of the plough. In support of their application the Society pointed out that the land to be cultivated would probably be more than sufficient to occupy the time of the plough. The area of land then occupied by members, who were increasing in number, was 150 acres. Apart from land let by private owners, several hundred acres were let by the county council in Pinvin and two adjoining parishes, and it was concluded, therefore, that there would be no difficulty in letting the plough to non-member smallholders, if its time were not fully occupied on land belonging to members.

It was estimated that the profit and loss account for the first year would read somewhat as follows:

	£	s	d		£	s	d
To repayment of principal, and interest at, say 5 per cent. for 8 years	26	19	7	By ploughing 200 acres at 15s. per acre	150	0	0
To wages of man, part time	30	0	0	By skimming 150 acres at 2s. 6d. per acre	18	15	0
To petrol, repairs, etc.	56	0	0	By scuffling 50 acres at 5s. per acre	12	10	0
To sundry espenses	10	0	0				
To balance, for reserve and contigencies	58	5	5				
	£181	5	0		£181	5	0

Although they fully sympathised with the proposal the County Council decided that in the present circumstances they could not see their way to make the necessary loan, and the Society, therefore, had to obtain the money from other souces. £92 10s. was raised by subsciption and £96 from friends of the movement, the latter sum being treated as loan share capital. After paying for the plough, a stock of petrol, and for certain labour in preliminary trials there was an adverse balance of £2 11s. 9*d*.

The plough was not obtained in time for the autumn ploughing in 1915, and in the early part of 1916 the weather was too bad to allow of it being used very much. From the work carried out, however, the Society are satisfied that the enterprise will be successful and profitable to the members.

Part II: Insurance and Thrift

UNITED STATES.

LIFE INSURANCE INVESTMENTS WITH SPECIAL REFERENCE TO FARM MORTGAGES.

A report dealing with the above subject and containing valuable information was submitted to the Ninth Annual Meeting of the Association of Life Insurance Presidents on December 9, 1915, by one of its members, Mr. Robert Lynn Cox (1).

In our issues for April and May 1913, we published an article by Mr. George K. Holmes on the sources of agricultural credit and rural indebtedness in the United States. The data contained in this article were supplied by the census of 1910, and by a special enquiry carried out by Government in 1912. The report, of which we reproduce the essential parts and the most significant figures below, although it has no official character, contains statistical information up to 1914, supplementing the data of the census and elucidating several interesting points.

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On considering the status of assets of the principal American life insurance companies, according to the Insurance Year Book, it is observed that in ten years (from 31st December 1904 to 31st December 1914) the assets of American companies has almost doubled, rising from $ 2,499,060,998

(1) Robert Lynn Cox, Life Insurance Investments with special reference to Farm Mortgages. A report submitted on Dec. 9th 1915 to the 9th annual general meeting of the Association of Presidents of Life Insurance Societies.

to $ 4,935,252,793; this increase kept pace with the growth in national wealth, which also about doubled during that period. During the same period the companies' holdings in real estate have decreased over 7 ½ million dollars, falling from $ 180,875,035 to $ 171,173,551; proportionally, however, the decrease is still greater, because this class of investment, which in 1904 formed 6.24 % of the total, represented only 3.47 % in 1914. On the other hand, investments in real estate mortgages are two and a half times as large, increasing from $ 671,577,813 to $ 1,706,365,405, and in proportion to the total investments they represented at the end of 1914 a percentage of 34.58 as against 26.88 in 1904.

In view of the considerable holding of life insurance companies in real estate mortgages and the steady increase of their ratio to other assets, the association of presidents of these societies thought it desirable to make a critical examination of these securities by a geographical distribution of amounts loaned on farms compared with other real property, with average interest rates, etc. To this end it invited the co-operation of the life insurance companies of the country, 125 of which replied giving data by States and class of securities. One large company having declined to report, the Association itself tabulated its investments. The figures found on the following pages therefore include the mortgage loans of 126 companies amounting to 97 % of all such loans held by American companies. Twenty-two other companies having reported on their mortgage loans, divided between farms and other real properties but not classified by States, it was possible to show the separation between farm and other real property loans of 98 ¼ % of all outstanding mortgages of American companies. Of these 148 companies, 17 make loans only on farm property, 15 only on real property in cities, towns or villages, while 116 loan on both farm and city properties. The amount loaned by the 17 farm loan companies on farms is $ 92,827,709; the amount loaned by the 15 city loan companies is $ 426,260,163 and the amount loaned by the 116 companies loaning on both is $ 1,158,014,595. The total mortgage loans of these 148 companies amounted at the 31st December 1914 to $ 1,677,102,467, of which $ 654,650,505.72 or 39.03 % were on United States farms, $ 993,480,170.03 or 59.24 %, were on other real property in the United States, and the balance, $ 28,971,792.14, or 1.73 »%, were loaned on real estate mortgages in Porto Rico and foreign countries, mostly in Canada.

There are 102 American companies whose figures are not included, but as their combined mortgage loans amounted only to $ 29,262,938, or 1 ¾ % of the total held by all American companies, their absence will not affect materially the completeness of this tabulation of life insurance mortgage investments.

Table I shows the average amount of farm loans and other real property made by insurance companies in the various sections of the country at the 31st December 1914, with columns showing the respective percentages loaned on farms and other real property.

TABLE I. — *Mortgage Loans on Farms and other Real Property at December 31, 1914.*

Groups of States	Farm Loans	% of total	Loans on other Real Property	% of total	Real Estate Mortgage Holdings
	$		$		$
New England . . .	104,875.00	0.56	18,387,384.79	99.44	18,492,259.79
Middle Atlantic. . .	827,171.47	0.13	598,336,948.65	99.87	599,164,120.12
Central Northern . .	116,800,717 55	49.63	118,533,747.23	50.37	235,334,464.78
South-Atlantic . . .	20,433,173.11	31.70	43,982,393.37	68.30	64,385,566.48
Gulf of Mexico and Mississippi Valley.	20,870,348.27	44.02	26,543.483,69	55.98	47,413,831.96
Southwestern . . .	187,204,378.15	76.05	58,966,102.81	23.95	246,170,480.96
Northwestern . . .	284,118,815.99	86.05	46,094,188.83	13.95	330,213,004.82
Pacific	16,601,908.04	19.72	67,603,321.44	80.28	84,205,229.48
Total . . .	$ 646,961,387.58	39.80	$ 978,447,570.81	60.20	$ 1,625,408,958.39
Total of 22 other insurance companies	7,689,118.14	33.84	15,032,599.22	66.16	22,721,717.36
Total United States.	$ 654,650,505.72	39.72	$ 993,480,170.03	60.28	$ 1,648,130,675.75

The proportion of farm loans varies greatly, ranging from 0.13 % in the Middle Atlantic to 86 % in the North-western group. The average of the 148 companies for the whole of the United States is 39.72 %. The amount loaned on farms is negligible in the Eastern States ; in the Central, Northern and Southern groups they rise to considerable amounts, but it is in the great South-Western and North-Western sections, whose agricultural development in the last 50 years has been so marvellous, that the great bulk of the life insurance farm loans have been placed.

Table II shows the ratio of farm loans by life insurance companies to total farm loans, as given by the United States census for 1910 (the latest available estimate). It should be pointed out that the enumerators of the census only included the data of *mortgaged farms occupied by the owner*, so that mortgages upon *rented farms* were left out. By way of a useful standard of comparison, this table also contains a group showing the savings-bank deposits in each State.

TABLE II. — *Farm properties. — Amount of total outstanding Mortgages and Proportion of outstanding Mortgages held by Life Insurance Companies.*

Groups of States	Farm Mortgages reported by U-S Census 1910	Savings Bank Deposits June 30, 1914	Life Insurance Farm Loans, 1914	
			Amount	Per cent. of Census Figures
	$	$	$	
New England	58,535,508.00	1,543,121,525.30	104,875.00	0.18
Middle-Atlantic . . .	197,124,813.00	2,253,737,250.83	827,171.47	0.42
Central Northern . . .	459,886,968.00	279,830,222.71	116,800,717.55	25.39
South Atlantic. . . .	54,798,664.00	51,600,550.49	20,433,173.11	37.29
Gulf of Mexico and Mississippi Valley .	68,719,944.00	49,309,863.17	20,870,348.27	30.37
Southwestern	317,376,816.00	10,314,118.02	187,204,378.15	58.98
Northwestern	440,044,686.00	257,295,956.26	284,118,815.99	64.5
Pacific	129,685,452.00	500,507,745.03	16,601,908.04	12.8
Total . . .	$1,726,172,851.00	$4,945,717,231.81	$647,083,487.58	37.48

It will be seen from this table that whilst the amount of farm mortgages reported by the census of 1910 in the New England and Middle Atlantic States is more than twice as great as the amount in the South Atlantic and Gulf and Mississippi Valley combined, the life insurance companies have loaned less than $ 1,000,000 in the New England and Middle Atlantic States, while they have loaned over $ 40,000,000 in the other two groups indicated. The obvious explanation is furnished by the column showing Savings Bank deposits. The local accumulations of savings bank and private capital have provided for the demand for farm loans in the older and more populous sections of the country, leaving the life insurance funds contributed in large part by these sections free to flow into the newer sections where the local supply of capital is inadequate to meet the demands of rapidly developing communities. How great this assistance of life insurance companies has been to these sections is shown by the fact that their outstanding loans at 31st December 1914 amounted to 64 ½ % of all the farm loans reported by the census of 1910 in the North-West, 59 % in the South-West, 37 % in the South Atlantic and 30 % in the Gulf and Mississippi States.

Table III further elucidates the relations between the farm and city loans of the various States and sections. It shows the total value of farm

lands and improvements on the one hand and of all other lands and improvements on the other, in each geographical section of the country. The figures of this table are not however strictly correct. The United States census in 1910 made a canvas in order to learn the value of farm lands and improvements. No such canvas was made to show the value of city, town and village lands. The Census Bureau, however, has made an estimate of the total value of *all* real property for the year 1912. The only way therefore in which an approximate estimate of the value of real property other than farms can be arrived at is by deducting the 1910 value of farm lands and improvements from the 1912 estimates of combined values. The result was to show the percentages appearing in the following table.

TABLE III. — *Ratio between the total value of Farm Property and other Real Estate Property in the United States.*

Groups of States	Total value of Real Property and Improvement (1912)	Farm Property and Improvement		Other Real Property	
		Amount (1910)	%	Valuation	%
	$	$		$	
New England	7,248,043,478	718,544,808	9.9	6,529,498,670	90.1
Middle-Atlantic . . .	32,735,357,510	2,746,073,552	8.2	29,989,283,958	91.8
Central Northern. . .	23,748,446,047	8,873,991,594	37.3	14,874,454,453	62.7
South Atlantic. . . .	5,116,668,591	2,183,312,025	42.7	2,933,356,566	57.3
Gulf of Mexico and Mississippi Valley .	4,410,620,949	1,975,942,289	44.8	2,434,678,660	55.2
Southwestern	14,977,905,972	6,865,162,850	45.8	8,112,743,122	54.2
Northwestern	14,138,255,355	8,510,446,519	64.2	5,627,808,836	35.8
Pacific	9,341,833,071	2,927,652,060	31.9	6,414,181,011	68.1
Total . . .	$111,717,130,973	$ 34,801,125,697	31.4	$ 76,916,005,276	68.6

On calculating the ratio between the amount of city and farm loans granted by life insurance companies and the respective value of farm property and other real estate in the great geographical divisions of the country, it is found that the average ratio of the farm loans is 1.859 % against 1.259 % for the loans on other real estate. The former class of loan therefore evidently leads. For reasons set out above, the proportion is higher in the North-Western States where agricultural progress has been marvellously rapid (3.338 %), in those of the South-West (2.726 %) and those of the Gulf of Mexico and the Mississippi Valley (1.056 %). On the other hand it is very low in New England (0.014 %) and in the Middle Atlantic

(0.030 %). The predominance of farm loans in life insurance company investments is likewise brought out clearly on comparing the ratio between the total value of farm property on the one hand and other real estate on the other, in the different groups of States, and the respective proportion of the mortgage loans of both kinds granted by them. In this way it is found that 39.81 % of their mortgages relate to farm properties, while the ratio between farm property and other real estate is only 31.4 %.

Table IV shows the amount of mortgage loans granted by the 126 principal life insurance companies in the different States, the average rate of interest and the average value of the lands per acre according to the census of 1910.

TABLE IV. — *Distribution of Mortgage Loans on Farm Properties granted by Life Insurance Companies in the different States at the 31st December 1914.*

States	Amount of Loans	Average rate of interest	Average value of the land per acre
	$		$
Iowa	139,511,101	5.32	82.58
Nebraska	62,390,393	5.34	41.80
Kansas	60,395,448	5.46	35.45
Missouri	58,406,800	5.35	41.80
Illinois	49,941,759	5.16	95.02
Indiana	47,014,148	5.31	62.36
Minnesota	33,981,293	5.36	36.82
Texas	32,242,856	6.99	14.53
Oklahoma	28,056,308	5.91	22 49
South Dakota	26,950,777	5.44	34.69
North Dakota	18,142,658	5.88	25.69
Ohio	16,588,937	5.30	53.34
Georgia	14,828,323	6.28	13.74
Tennessee	9,386,015	5.56	18.53
California	8,736,255	6.42	47.16
Kentucky	6,282,692	5.41	21.83
Arkansas	3,851,605	6.99	14.13
South Carolina	3,377,477	6.47	19.89
Colorado	2,945,316	6.92	26.81
Montana	2,900,458	7.29	16.74
Idaho	2,754,254	8.53	41.63
Mississippi	2,719,824	6.99	13.69
Washington	2,931,781	6.97	44.18
Wisconsin	2,003,744	5.53	43.30
North Carolina	1,475,010	5.79	15.29
Louisiana	1,379,502	7.64	17.99
New-Mexico	1,306,042	7.55	8.77
Michigan	1,252,126	5.41	32.48
Utah	1,192,602	8.74	29.28
Oregon	1,107,912	6.66	35.23
Alabama	1,102,313	7.34	10.46
Virginia	645,450	6.00	20.24
Maryland	423,000	5.84	32.32
Arizona	407,602	7.20	33.97
Pennsylvania	331,156	5.75	33.92
Wyoming	241,933	7.71	10.41
Connecticut	75,050	5.26	33.03
Florida	66,004	6.00	17.84
Delaware	45,100	5.97	33.63
West Virginia	40,907	5.70	20.65
New Jersey	16,965	6.00	48.23
Vermont	13,775	5.26	12.52
Nevada	11,500	8.00	12.99
New-York	10,950	5.56	32.13
Massachusetts	10,100	5.19	36.69
Maine	5,950	5.80	13.73
New Hampshire	—	—	13.70
Rhode Island	—	—	33.86
Total	$ 646,961,371	—	—
Average	—	5.55	$ 32.40

A glance at this table shows the correlation between the amount of loans and the value of the land. In the first 8 States, where the total amount of mortgage loans exceeds $ 30,000,000, only 2 are out of their right place if this correlation were consistent throughout, namely Illinois and Texas. In the rest of the list the connection between these two figures is not so striking ; there are even some marked exceptions: the State of New York, for instance, which is one of the first as regards value of lands, is at the end of the list as to the amount of the loans.

A more careful examination of the table brings out a very close and apparently direct connection between high value of land and low rate of interest. There are about 31 States where the value of the land exceeds $ 20 per acre. In 18 of them the rate of interest is 6 % maximum. On the other hand, there are 17 States where the value of lands is below $ 20 per acre and in 11 of these States the average interest exceeds 6 %. In conclusion, the States where agriculture is rationally conducted, where farms have the necessary accomodation and up-to-date machinery, and improved methods of cultivation, attract capital at a relatively low rate of interest. In those however where the laws on title deeds and transfers of property, and calling in of mortgages are old, or whose statutes contain enactments restricting the free exercise of economic transactions, the available capital is much less considerable and the rate of interest is higher.

An examination of the rate of interest on mortgage loans granted by life insurance companies leads to another observation. The rate of interest of farm lands is higher than that of other real estate loans in all the groups of States except the two great groups of the Middle North and North-West, where the value of the lands is highest, and the difference between these two classes of loans is very small.

The report from which we derive this information gives no detailed statistics concerning the average amount of the two classes of loans ; but on examining the total amount of the loans of nine companies, six of which grant loans exclusively or chiefly on farm properties, with the total of loans of nine other companies giving loans chiefly or exclusively on town property, the reporter was able to ascertain that on the average the loans on farm mortgages amount to $ 2,500 as against an average of $ 75,000 for the others. If account be taken of the act that the expenses involved in survey of the property, perusal of title, draft deeds, collecting interest, etc., are about the same in both classes, the higher rate of interest generally demanded for farm buildings becomes intelligible.

Since, on the other hand, as we pointed out above, the States where interest is highest are those where the value of land is comparatively lowest, a reduction in the rate of interest may reasonably be anticipated in these States when they develop and the value of their lands increases. Again, the tendency of capital to flow to the points where interest is highest is another fact likely to cause its reduction, even if the value of the lands undergoes no change.

There are no statistics to allow of following year by year the varia-

tions in mortgages granted by life insurance companies as regards farm mortgages considered separately, but the reports of the companies allow us to compare the amount of these loans (comprising farm and other mortgages) at three years' interval: 1911-1914. The following figures show the geographical distribution of the mortgage loans of 34 principal life insurance companies whose assets represent 90 % of the total assets of companies of this kind in the United States. The three groups of States where the relative increase is most considerable are precisely those where the rate of interest is highest.

TABLE V. — *Increase of Mortgage Loans by Life Insurance Societies from* 1911 *to* 1914.

Group of States	Amount at 31st December 1911	Amount at 31st December 1914	Increase %
New England	$10,035,604.17	$12,079,867.25	20.37
Middle Atlantic	520,794,716.89	588,467,448.15	12.99
Central Northern	156,783,458.29	187,315,645.75	19.47
South Atlantic	24,854,150.08	56,108,044.06	125.74
Gulf of Mexico and Mississippi Valley	33,182,738.06	45,064,788.70	35.79
Southwestern	160,225,259.63	196,205,329.02	22.45
Northwestern	211,079,949.58	260,709,557.24	23.49
Pacific	54,986,984.20	77,807,445.02	41.50
Total	$1,171,942,860.90	$1,423,758,125.19	—
		Average increase	21.49

No statistics have been compiled showing the amount of mortgage loans on farm properties granted by the Banks in each State, but the report of the comptroller of the currency shows the amount of the loans secured on farm properties, and separately that of the loans secured on other real estate throughout the country, by *all* Banks and trust Companies at the 30th June 1914.

TABLE VI. — *Total Amount of the Mortgage Loans granted by all Banks of the United States, outstanding at the 30th June 1914.*

Class of Establishment	Secured on Farm Properties	Secured on other Real Estates
14.512 State Banks	$258,700,000.00	$280,700,000.00
634 Mutual Savings Banks	88,100,000.00	1,809,500,000.00
1.466 Share Savings Banks	81,700,000.00	397,200,000.00
1.064 Private Banks	16,900,000.00	9,700,000.00
1.564 *Loan and Trust Companies*	96,700,000.00	468,800,000.00
7.525 National Banks	—	—
Total (26.765 Banks)	$542,100,000.00	$2,965,900,000.00
Total mortgage loans of 148 life insurance companies	$654,650,505.72	$993,480,170.03

Evidently therefore life insurance companies are by far the biggest holders of mortgages on farm properties in the United States, the amount possessed by them exceeding by about 20 % the total farm mortgages of the 26,765 Banks of the country.

According to the figure of farm mortgages given by the 1910 census the life insurance companies hold about 37 ½ %, the Banks about 31 ½ %, and private investors and various institutions about 31 %.

Part III: Credit

GERMANY.

THE MORTGAGE MOVEMENT IN PRUSSIA UP TO 1913, ANALYSED ACCORDING TO OCCUPATIONS OF THE MORTGAGORS.

SOURCE:

KÜHNERT (Dr. F.) L: *Hypothekenbewegung in Preussen nach Berufsgruppen der Hypothekenschuldner.* (The Mortgage Movement in Prussia according to the occupations of the Mortgagors, in: *Zeitschrift des Kgl. Preussischen Statistischen Landesamts*, Fünfundfünfzigster Jahrgang 1915. Berlin, 1915, Verlag des Kgl. Statistischen Landesamts.

The mortgage movement in Prussia examined separately for *urban* and *rural* districts, and according to the grouping or business occupations of the mortgagors (mortgagors belonging to *rural* and *forest* occupations, those engaged in *industry* and *commerce*, and those of other professions) underwent the following fluctuations in 1909-1913:

	Year	Mortgage registrations — Mill. of m.	Mortgage cancellations — Mill. of m.	Excess of registrations over cancellations — Mill. of m.
Urban districts	1909	3,174.05	1,656.95	1,517.10
	1910	2,292.73	1,710.93	1,581.80
	1911	3,205.05	1,709.75	1,495.30
	1912	2,505.47	1,536.89	968.58
	1913	2,149.51	1,416.65	732.86
Rural districts	1909	1,397.75	757.47	640.28
	1910	1,524.79	790.99	733.80
	1911	1,550.92	811.04	739.88
	1912	1,581.57	850.77	730.80
	1913	1,620.42	833.28	787.14
Total	1909	4,571.80	2,414.42	2,157.38
	1910	4,817.52	2,501.92	2,315.60
	1911	4,755.97	2,520.79	2,235.18
	1912	4,087.04	2,387.66	1,699.38
	1913	3,769.93	2,249.93	1,520.00

Both the aggregate and the town mortgage charge therefore show a reduction in the above period, while that of rural districts is increasing.

The considerable increase in the excess of mortgage registrations over cancellations in rural districts denotes that of late years rural property has undergone a very great growth in value relatively to town property; this is due to the very great and constant improvement of the yield of agriculture and to the formidable rise, in consequence, of land values as a source of private income. It must however be borne in mind that the rural mortgage movement is much influenced by the fact of industries making their way into communes still chiefly agricultural. The extent to which this occurs becomes evident on classifying and grouping the mortgagors according to their occupations, which system was first introduced in 1913. The figures given below relate to this latter year.

In 1913 there were :

Urban districts.

Groups of debtors —	Mortgage registrations — Mill. of m.	Mortgage cancellations — Mill. of m.	Excess of registrations over cancellations — Mill. of m.
Agriculture and forest economy.	80.34	49.02	31.32
Industry and trade . .	1,624.71	1,023.93	600.78
Other occupations . .	444.46	343.70	100.76
Total . . .	2,149.51	1,416.65	732.86

Rural districts.

Agriculture and forest economy.	1,081.43	548.91	532.52
Industry and trade . .	399.98	212.01	187.97
Other occupations . .	139.01	72.36	66.65
Total . . .	1,620.42	833.28	787.14

Urban and Rural Districts.

Agriculture and forest economy.	1,161.77	597.93	563.84
Industry and trade. .	2.024.69	1,235.94	788.75
Other occupations . .	583.47	416.06	167.41
Total . . .	3,769.93	2,249.93	1,520.00

From the above table it is clear that the figures of the town mortgage movement are in no way influenced by the registrations and cancellations of mortgagors of the agriculture and forest economy group. Much more important to the rural mortgage moment are the particulars relating to the groups " industry and trade " and " other occupations ".

While in town districts, of the total excess of registrations over cancellations, the proportion belonging to the agriculture etc. class is 4.3 %, *i. e.* little above $^1/_{25}$, the quota corresponding to the principal group " industry and trade " is 82 %, *i. e.* quite $^4/_5$, and that of the " other occupations " 13.7 %, *i. e.* nearly $^1/_7$.

On the other hand the proportion of the excess of registrations over cancellations in rural districts for the agriculture and forest economy group is 67.7 %, *i. e.* a little more than $^2/_3$; the quota for the " industry and trade " group is 23.9 %, or nearly $^1/_4$; that of the group " other occupations " amounts to 8.5 %, or $^1/_{12}$ in round figures.

On summing up the data both for urban and rural districts it is found that to the industry and trade group alone there corresponds more than one-half (51.9 %) of the entire increase of mortgage debts during 1913, while for the class '" agriculture, etc. " the proportion is only $^2/_5$ (37.1 %) and for the remaining occupations $^1/_9$ (11 %).

Generally speaking, therefore, the rural districts of Prussia represent the larger percentage of the excess of registrations over cancellations in 1913, but as we have seen, we are dealing here with mortgage charges which are to a great extent, *i. e.* to one-third of the total excess shown by the rural districts, on properties whose owners do not belong by occupation to the agricultural class, but to industry or trade, or other occupations. To this must likewise be attributed the fact that in urban and rural districts together about $^2/_3$ of the total of extra mortgage encumbrance relates to mortgagors not belonging to the agriculture and forest economy group, and that in 1913 such increased charge was chiefly in reference to urban districts, though the encumbrance of rural districts has also not inconsiderably increased during the past few years.

A noteworthy fact, moreover, is that in cities and rural districts together the mortgage registrations of the group " agriculture and forest economy " only amount to $^3/_{10}$ of the total sum of all registrations and are less than $^3/_5$ of the amount for the industry and trade group, but that notwithstanding this, the excess of registrations relating to agriculture was nearly $^2/_5$ of the total, and about $^7/_{10}$ of that relating to industry and trade. This is due to the fact that on the one hand the amount of the cancellations for agriculture was only exceeded one-half in round figures by the amount of registrations, while on the other hand it was only exceeded by $^2/_5$ both generally and as compared with industry and trade. The greater stability of mortgages relating to agriculture and forestry, as compared with those originating from industry and trade and other occupations, therefore unquestionably had a considerable influence on the amount of additional rural and forest encumbrance.

We may finally point out that in all the classes of occupations of

town districts the cancellations compared much more favourably with registrations than in rural districts.

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Up to the present we have examined the mortgage movement in Prussia during 1913 generally, *i. e.* not excluding any mortgage charge.

It is expedient here to point out that by ministerial circular of the 12th August 1912 there was ordered the identification of the amounts in respect of so-called security mortgages (Sicherungshypotheken) within the meaning of § 1184 et seq. of the Civil Code. The encumbrance in this case is determined by the credit to be secured, on the basis of which the rights of the mortgagee are defined ; the existence of such mortgage must therefore be proved by the mortgagee when he enforces his right, without his being able to invoke registration in the mortgage registers.

Within this category likewise is the so-called mortgage of maximum amount (Höchstbetragshypotek), under § 1190 of the Civil Code, according to which, for instance in case of opening of a credit with fixed maximum in favour of a real estate owner, there is only registered the maximum amount secured on the estate, even if the owner should actually become a debtor for a less amount.

The special character of this mortgage and the purposes, chiefly banking and commercial, which it subserves, together with the extent to which it is made use of, justify a survey of relevant figures for 1915, the first year in which such figures were compiled.

We shall then use these figures also to ascertain the amount of pure mortgages in Prussia in 1913, that is to say, the mortgage movement to the exclusion of security mortgages.

Urban Districts.

Groups	Registrations — Mil. of m.	Percentage of total mortgage registrations —	Cancellation — Mil. of m.	Percentage of total mortgage registrations —	Excess of registrations over cancellations —	Percentage of total excess of all mortgage registrations —
Agriculture and forest economy . .	16.50	20.5	7.43	15.2	9.08	29.0
Industry and trade .	302.51	18.6	148.48	14.5	154.02	26.6
Other occupations .	45.79	10.3	32.73	9.5	13.06	13.0
Total . . .	364.80	17.0	188.64	13.3	176.16	24.0

Rural districts.

Agriculture and forest economy . .	187.83	17.4	72.51	13.2	115.32	21.7
Industry and trade .	92.61	23.2	35.31	16.7	57.30	30.5
Other occupations .	19.52	14.0	7.72	10.7	11.80	17.7
Total . . .	299.96	18.5	115.54	14.0	184.42	23.4

Aggregate figures.

Agriculture and forest economy . .	204.33	17.6	79.94	13.4	124.40	22.1
Industry and trade .	395.12	19.5	183.79	14.9	211.33	26.8
Other occupations .	65.31	11.2	40.45	9.7	24.86	14.8
Total . . .	664.76	17.6	304.18	13.5	360.59	23.7

Deducting these figures from those of the general mortgage movement referred to above, the particulars are obtained for *pure mortgages, i. e.* to the exclusion of security mortgages.

In 1913 pure mortgages showed the following figures :

Urban districts.

Groups	Mortgage registrations — Mil. of m.	Mortgage cancellations — Mil. di m.	Excess of registrations over cancellations — Mil. of m.	Percentage of total excess of all mortgage registrations —
Agriculture and forest economy	63.84	41.59	22.24	71.0
Industry and trade .	1,322.20	875.45	446.76	74.4
Other occupations . .	398.67	310.97	87.70	87.0
Total . . .	1,784.71	1,228.01	556.70	76.0

Rural districts.

Agriculture and forest economy	893.60	476.40	417.20	78.3
Industry and trade .	307.37	176.70	130.67	69.5
Other occupations . .	119.49	64.64	54.85	82.3
Total . . .	1,320.46	717.75	602.71	76.6

Aggregate figures..

Agriculture and forest economy	957.44	518.00	439.34	77.9
Industry and trade .	1,629.58	1,052.15	577.42	73.2
Other occupations . .	518.16	375.61	142.55	85.2
Total . . .	3,105.18	1,945.76	1,159.41	76.3

The above data suffice to give an exact idea of the town and rural mortgage movement in Prussia in 1913 according to the classes of mortgagors and in relation both to mortgages generally and those called " pure mortgages ", *i. e.* mortgages exclusive of the so-called security mortgages under §§ 1184 et seq. of the German Civil Code. We finally observe that these figures relate to the year prior to the war, and are therefore of still greater importance in order to allow of ascertaining in due course the changes with have occurred in the mortgage status of Prussia during the present conflict.

ITALY.

THE AGRICULTURAL CREDIT DEPARTMENT OF THE BANK OF SICILY IN 1915.

SOURCES :

Consiglio Generale del Banco di Sicilia. Sessione ordinaria del 1916. Rendiconto e Bilancio consuntivo sul servizio del Credito Agrario. Esercizio 1915. (*General Council of the Bank of Sicily. Ordinary Sitting for* 1916. *Accounts and Summary Balance Sheet of the Agricultural Credit Department. Financial Year* 1915). Palermo, Stabilimento d'Arti Grafiche A. Giannitrapani, 1916.

Agricultural Credit in Sicily is in the hands of a special Department of the Bank of Sicily, which, like other institutions of the kind, conducts it through intermediary bodies ; we shall deal separately with the growth of the latter bodies or distributing agencies and the operations of the Department in 1915, on the basis of its last reports.

§ 1. Intermediate bodies.

As appears from the Bank's Report, in the course of 1915 the Department was, as regards intermediate bodies, engaged chiefly in reconstructing and strengthening rather than extending the existing organisation.

The number of bodies admitted to operate rose from 335 at the 31st December 1914 to 342 at the 31st December last. Of these quite 320 were co-operative societies — 276 unlimited, 41 limited and 3 a combination of both — and 22 bodies corporate.

The following table collates these particulars with those for the previous years :

TABLE I. — *Classification of Intermediate Bodies according to their form.*

Form of the bodies admitted to these operations	At 31st December								
	1907	1908	1900	1910	1911	1912	1913	1914	1915
Unlimited Societies	33	87	126	159	185	214	255	270	276
Limited »	9	23	26	37	39	40	45	41	41
Societies with limited and unlimited members	—	1	2	2	3	3	3	3	3
Bodies corporate	—	—	3	4	12	18	20	21	21
Total	42	111	157	202	239	275	323	335	342

On comparing the particulars for the last two years, 1914 and 1915, it is found that though the number of limited societies and those with limited and unlimited liability members has remained unchanged, and that of bodies corporate has increased by one only, the number of unlimited liability societies has grown from 270 to 276, thus effectively contributing to the organisation of agricultural credit in Sicily.

Considered according to their kinds, the institutions admitted to these operations are divided as follows :

Co-operative agricultural labour and production	137
Agricultural financial societies	89
Rural financial societies	48
Agricultural unions	20
Agricultural banks	14
Monti frumentari	12
Agricultural societies (bodies corporate)	9
Agricultural associations	7
Popular banks	4
Co-operative wine-makers	2
Total	342

These institutions at the 31st December last had 59,761 members, with assets of lire 4,166,315 and assets of the unlimited liability members of lire 212,043,174.

The credits allowed them in 1915 amounted to lire 16,459,000.

It is also of interest to point out how the agricultural credit organs are distributed through the Island, taking as a basis the number of intermediate bodies allowed to operate in the different communes in the district:

	Communes in the division	Number of bodies allowed to operate
	—	—
Palermo	76	63
Messina	97	28
Catania	50	25
Caltagirone	13	25
Girgenti	41	65
Trapani	20	55
Syracuse	32	30
Caltanissetta	28	51
	357	342

Of the 189 communes over which at the above date were distributed the 342 institutes registered in the *Castelletto agricolo*, 98 has one each, 59 had two, 19 three, 8 four, 3 five, 1 nine and finally 1 thirteen.

§ 2. Operations in 1915.

The transactions of the above Department in the expired financial year were 45,813 totalling lire 12,648,222. In the following table the particulars of the discounts granted by it in the nine years of its existence are given:

TABLE II. — *Operations of the Department from* 1907 *to* 1915.

Year	Transactions :									
	Intermediary bodies						With private persons		Grand total	
	Rediscounts		Direct-discounts		Total					
	No. of bills	Amount	No. of bills	Amount	No. of bills	Amount	No. of bills	Amount	No. of bills	Amount
1907	929	181,255 —	8	113,638.92	937	294,913.92	4336	805,341.60	5273	1,100,255.52
1908	9663	1,881 708.63	31	127,629.69	9694	2,009,338.32	819	182,960 —	10513	2,192,298.32
1909	16113	3,634,759.89	68	372,019.93	16181	4,006,979.32	169	54,290 —	16350	4,061,269.32
1910	25490	6,089,063.57	145	999,201.78	23635	7,088,265.36	103	31,455 —	25738	7,119,720.36
1911	30766	7,852,904,57	198	1,262,692.58	30964	9,115,597,15	83	22,374.99	31047	9,137,972.14
1912	37818	9,990,308.72	287	2,035,327.09	38105	12,025,635.81	69	13,755 —	38174	12,039,390.81
1913	48290	13,374,781.01	371	2,245,375.70	48661	15,620,156.71	51	8,475 —	48712	15,628,631.71
1914	38764	9,734,464,94	397	3,45 ,619.84	39161	15,694,084.78	125	52,075 —	39286	13,746,159.78
1915	43362	9,804,550.11	349	2,727,102.35	45711	12,331,652.46	102	116,570 —	45813	12,648,222.46

The operations in 1915 therefore show an increase over the previous year of 6527 bills, and at the same time a reduction of lire 1,097,937. This reduction is partly accounted for by the precautions and measures adopted with a view to making sure of the bona fides of each operation.

The operations are distinguished as follows, according to their purpose : I. for seeds, manures, fungus destruction, cultivation and harvesting, 45,110 loans of lire 9,703,754 ; II. for machinery, implements, livestock, etc. 354 loans for lire 217,365 ; III. for discounts to intermediate bodies direct, 349 loans for lire 2,727,102.

According to the position or occupation of the borrowers, the operations are divided as follows : (1)

Landowners	18,930	loans for lire	4,486,327
Tenants	21,266	" "	4,469,869
Share farmers	3,559	" "	628,003
Leaseholders	1,709	" "	336,919

And according to the different cultivations, the operations are classified thus :

(1) There were also discounted direct to the intermediate bodies for various purposes 349 bills of exchange, for lire 2,727,102.

TABLE III. — *Classification of Operations according to Cultivations.*

Establishments	Burseries		Vineyards		Citrns groves		Oleve groves		Varions cultivations		Totals	
	No. of bills of exc.	Amount	No. of bills of exc.	Amount	No. of bills of exc.	Amount	No. of bills of exc.	Amount	No. of bills of exc.	Amount	No. of bills of exc.	Amount
Palermo	2172	470,777.51	2673	557,015.95	2458	909,454.89	461	107,640,26	256	30,456.10	8020	2,075,344.71
Messina	266	90,721.18	288	89,294.46	296	127,259.30	101	22,717.01	48	14,345.00	999	344,336.95
Catania	1147	270,324.17	292	52,626.40	100	47,604.35	6	3,050.00	14	4,071.10	1559	337,676.02
Girgenti	6685	1,470,714.00	645	169,328.00	21	11,379.00	46	11,713.50	210	52,003.00	7607	1,715,137.50
Trapani	5746	1,064,585.18	1667	420,480.65	3	800.00	10	5,880.00	110	15,520.00	7536	1,507,265.83
Syracuse.	1567	417,755.24	3350	551,957.35	523	191,254.50	111	30,454.50	206	41,790.50	5557	1,233,211.99
Caltanissetta . . .	9083	1,460,223.70	525	120,480.15	4	550.00	21	3,900.00	80	22,793.00	9713	1,607,946.85
Caltagiron e . . .	3529	902,964.27	779	184,085.15	178	64,245.65	10	5,065.00	27	3,840.19	4473	1,060,200.26
Totals . . .	30145	6,048,065.25	10219	2,145,268.11	3533	1,352,547.69	766	190,420.27	951	184,818.79	45464	9,921,120 11 (1)

(1) There were also discounted direct to the intermediate bodies for various purposes 349 bills of exchange for L. 2,727,102.35.

In the aggregate credit granted during the said year the different provinces of Sicily had the following shares respectively :

Province		Amount
Palermo	lire	2,815,102
Caltanissetta	"	2,110,343
Girgenti	"	2,051,539
Trapani	"	1,804,396
Syracuse	"	1,619,057
Caltagirone	"	1,252,372
Catania	"	604,706
Messina	"	390,707
Total	lire	12,648,222

Finally, in 1915, the rate of interest charged by the Department on discounts was 4.25 % and 6.25 % that generally charged by intermediate bodies.

MISCELLANEOUS INFORMATION RELATING TO CREDIT IN VARIOUS COUNTRIES.

GERMANY.

COMPULSORY SALES BY AUCTION OF RURAL ESTATES IN PRUSSIA IN 1912. — (*Zeitzchrift des Klg. Preussischen Statistischen Landesamtes*, 1915. Berlin, 1915).

In the period 1886-1912 estates were sold by compulsory auction in Prussia according to the figures given below, being estates devoted chiefly to agricultural and forestry purposes and the owners of which had agriculture or forest economy as their chief occupation. These figures are exclusive of estates divided on passing by death or determination of joint ownership :

Year	Number of Estates	Total area	Aggregate net return of Estates
		hectares	marks
1886.	2979	110,063	983,458
1890.	2220	55,310	494,899
1895.	1834	67,259	671,599
1900.	1291	42,475	427,727
1901.	1244	42,683	527,889
1902.	1134	35,764	370,728
1903.	1047	32,334	286,330
1904.	1076	27,650	231,405
1905.	963	21,027	187,592
1906.	756	15,450	144,295
1907.	737	17,921	197,518
1908.	870	20,143	203,379
1909.	668	20,044	187,173
1910.	705	16,732	130,441
1911.	713	15,394	144,342
1912.	628	17,723	128,182

It follows from this that in the period 1886-1912 the number of rural landed properties put up to compulsory auction per year has been reduced nearly $^4/_5$, the area of same is reduced more than $^5/_6$ and the net estate yield by about $^7/_8$. Between the years 1911 and 1912 a diminution is

also observed of 85 in the number of properties and 16,160 marks in their total yield. The aggregate area on the other hand has increased by 2,329 hectares or 15.1 %.

If, in addition to the above, there are taken into account the compulsory auction sales of estates whose owners practised agriculture only as a subsidiary business, and those in consequence of breaking up and division of deceased estates the figures are as follows :

Year	Number of estates sold by auction	Area — hectares	Net estate yield — mar*s
1908.	2600	27,263	287,129
1909.	2440	26,814	251,997
1910.	2250	21,024	180,474
1911.	2124	20,103	199,698
1912.	2151	23,708	186,279

With these additions the number of compulsory actions is three times greater, while the area and the net estate yield undergo an increase of 31.2% and 39.3%. From this second table therefore it is apparent that the compulsory sales not included in the first table relate to very small properties ; in 1912 they average an area of barely 4 hectares, and a net revenue of 38 marks while the average of the other estates is 26 hectares with a net estate yield of 204 marks.

DENMARK.

I. THE MORTGAGE ASSOCIATION OF COPENHAGEN. — Beretning til Kontrolkomitéen for Hypotek-Foreningen for laan mod sekundaer prioritet i faste ejendomme i Københavh og omegn for 20 Regnskabsaar 1 april-31 marts 1915.

This institution and the three which will follow are distinguished from the other mortgage credit associations examined up to now (1) by the fact that their function consists in granting loans against second mortgages.

The mortgage Society of Copenhagen, founded in 1895 and operating exclusively in the district of the Danish capital, had at the 1st April 1914 2338 mortgages outstanding the original capital of which was kr. 40.780,700, of which the balance due at that date was 40,267,667 ; the proportion repaid was therefore small.

(1) See this Review for May and June 1916.

During the years 1914-15 326 applications for new loans to a total of kr. 3,354,400 came to hand, but only 229, aggregating 3,869,300 kr. were allowed and granted. This represents an average of kr. 16,897 for each loan.

During the same period there were paid off 18 mortgages totalling kr. 270,200, so that allowing for the ordinary reduction by repayment at the 31st March 1915, the number of mortgage loans had risen to 2549, of a total original amount of kr. 44,379,800 reduced by repayment instalments to kr. 43,699,498, or on the average 17,411 per loan.

Classing the loans according to amount we have the following table :

Amount of Loan	Number	Aggregate value = Kroner
Less than kroner 10,000.	1,305	5,044,200
From kroner 10,000 to 50,000	1,052	21,727,900
» » 50,000 » 100,000	128	8,428,800
» » 100,000 » 150,000	42	4,661,900
» » 150,000 » 200,000	9	1,482,500
» » 200,000 » 250,000	9	1,898,000
» » 250,000 » 300,000	4	1,136,500
Total . . .	2,549	44,379,800

No loan in the said period exceeded kr. 300,000.

In the majority of cases (about 51 %) the individual loans were not above 10,000 kr., and in about 93 % of the cases they did not exceed 50,000 kr. Loans in excess of this sum, however, (which, as they are granted against second or even lower rank mortgages, must necessarily be on real properties above the average in size) although they represented barely 7% of the total of loans, constituted about 40 % of the aggregate sum lent. If we consider only those loans below 10,000 kr. which are chiefly in respect of small properties, we find that though they were more than half in number of the loans, they represented less than one-eighth part (about 11 %) of the sum lent. This means that the institution chiefly benefits small and medium estates.

The total value of the landed property mortgaged was kr. 306,939,750, and the insured value kr. 215,649,096. This would mean that for each loan there is a real property security value kr. 120,415, and for each krone lent real property security of 7 kroner. This figure, which at first glance would seem excessive, will not appear so when it is considered that, as was just said, the mortgages rank after others existing previously and encumbering the same properties with an amount of kr. 150,303,506. In all there-

fore, on the real estates guaranteeing the loans, there was at the 31st March 1915, a debt of kr. 194,683,396 representing 61,8 % of the value of the real properties. This ratio is slightly higher than that found for the properties offered in first mortgage to the land credit instititutions.

The bonds issued by the Association, which at the beginning of the financial year represented the sum of kr. 39,570,500, had risen at the end of that working year to kr. 42,902,900.

The reserve and depreciation fund, which was kr. 1,522 979 grew during the same period to kr. 1,769,054.

The operations of the Institution have not been noticeably affected by the war, apart from the fact that its bonds, together with all other securities, declined heavily in price at its outbreak. Applications for and grants of loans were indeed in excess of any previous year.

There has moreover been no depreciation in real property nor any difficulty in the payment of interest and repayment instalments on outstanding loans.

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2. MORTGAGE UNION OF REAL PROPERTY OWNERS. — Beretning til tilsynsraadet for grundejernes Hypotek-Forening for laan mod sekundaer prioritet i faste ejendomme i København om foreningens 9de Regnskabsaar 1° april 1914-31 marts 1915.

The mortgage union, which also carries on its operations in the environs of the capital exclusively, is a young institution counting barely 9 years of life. The short period of its existence is perhaps the reason why, in contrast to the previous association, its report at the close of the year 1914-15 makes it clear that the effects of the war have been keenly felt.

During the year mentioned only 236 applications, for loans, a figure below previous years, were received. Of these, 26 were refused, 15 withdrawn, 193 granted, and 3 as yet unexamined at the end of the period.

Of the 193 applications granted only 175 were completed during the year, with an aggregate sum lent of kr. 1,764,600, averaging kr. 10,083 per loan. The report does not indicate the amount of each loan. It merely states that the estimated value of the property loaned on was kr. 10,206,300, which gives an average per property and loan of about kr. 58,322. The taxable value of these properties however is said to amount to kr. 11,950,200, hence the ratio between the loans granted and the estimated value would be only about 17 %. The loans however being on second mortgage, the pre-existing encumbrances must be added, amounting to kr. 5,831,748, or about 57 of the value of the properties. Adding to this figure the sums lent by the mortgage Union, the total is 7,596,348 or 74 % (57 + 17) of the value of the properties.

The percentage is rather high, and can only be justified by the fact that the land lies exclusively in the environs of the capital, and shows a marked tendency to increase in value.

The report further states that in this year as in previous years the Institute has had no special difficulties ; that the instalments of interest and repayment were regularly met, and none of the mortgaged properties has had to be taken over.

The general position of the Institute at the end of the working year was as follows : Loans aggregated 1062 with an original capital of kr. 16,811,850. The value of the mortgaged properties was kr. 89,510,400. The average amount of the loans was therefore kr. 15,830 ; the average value of the properties mortgaged kr. 84,285. On the latter there were already in existence first-rank mortgages of a total value of kr. 49,230,724, so that at the 31st March 1915 they were encumbered with an aggregate debt of kr. 66,042,574, representing about 73.8 % of their value.

At the same time the Institution had bonds in circulation to the amount of kr. 17,000,000, and a reserve fund of kr. 524,756.

On the whole its position, like that of the other land credit associations, was satisfactory.

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3. THE MORTGAGE ASSOCIATION OF AALBORG. — Beretning om hypotekforeningen for laan mod sekundaer prioritet i faste ejendomme i Aalborg i 19de Regnskabasaar.

The interesting report of this establishment for the financial year 1914-15 states that during this period not more than 37 applications for loans were received, of which 3 were rejected, and of the remaining 34 only 30 were definitely granted and completed, with a total amount of kr. 231,600.

The distribution of the loans is clearly evident from the following table :

Amount (Kroner)	Number	Aggregate sum (Kroner)
Less than 1,000	1	790
From 1,000 to 2,000	9	14,000
» 2,000 » 3,000	2	6,000
» 3,000 » 4,000	3	11,000
» 4,000 » 5,000	1	4,500
» 5,000 » 6,000	3	18.000
» 6,000 » 7.000	—	—
» 7,000 » 8,000	1	8,000
» 8,000 » 9,000	—	—
» 9,000 » 10,000	3	30,000
» 10,000 » 20,000	4	54,000
Above 20,000	3	85,000
Total	30	231,690

The average loan, therefore, was kr. 7,720, and the largest sum in respect of any one loan kr. 35,000.

The sphere of operations of this Association therefore is clearly distinct from that of the other two unions previously examined, as it exclusively comprises small and medium-sized properties. This is confirmed by the particulars given in the report with regard to the value of the estates and the charges on them.

The estimated total value of the 30 properties mortgaged was kr. 1,158,500, which would make an average of kr. 38,617 per property while with the other two associations we saw that the value fluctuated between 84,000 and 120,000 kroner. On these properties there already existed a mortgage debt of kr. 605,100, adding to which the kr. 231,600 granted by the Union on second mortgage, we reach the total figure of kr. 836,700, equal to 72.22 % of the value of the properties.

The same results are arrived at on examining the position of the Institution at the end of the financial year 1914-15.

The total loans granted were 672, for an original sum of kr.3,893,000, while at the end of the working year 1913-14 the figures were 658 and 3,736,300 respectively.

The Institution having existed for nineteen years, there would be an average of 37 loans and about kr. 204,900 per year; this is a comparatively modest figure, but is worth attention considering that the Union confines its action to the small province of Aalborg only, and is made up exclusively of small and medium holders. The estimated value of the properties

mortgaged was kr. 18,227,480 with an average of about 27,124 kr. per property, which is markedly above the average of the properties mortgaged in 1914-15. The first mortgage charge on them amounted to kr. 9,489,200, which would be about 50 % of their value. Adding to this however the second mortgage charge in favour of this association, an aggregate of kr. 13,382,200 is reached, forming 73,42 % or nearly three-fourths of the value, which seems a very high limit.

The Institution however does not appear to have sustained losses by over-evaluation of the real estates.

In the financial year 1914-15, 323 such estates were voluntarily sold for an aggregate of kr. 8,742,550, while their value as estimated by the Institution did not exceed 8,662,200. The report adds that each property is surveyed by the Direction before valuation, and its estimated value is the only fact taken into account in granting loans.

At the 31st March 1915 the Association had issued bonds to the amount of kr. 3,073,600, only one half of which were in circulation, the rest being made up of registered bonds entered in the registers of the society.

The report adds some particulars of the modes of repayment of the bonds :

The loans are divided into four series, each of them having its own plan of drawings. The first two series have been completed. They pay 2 ½ %, the others 3 ½ % to the reserve and management fund, which is one fund, and amounted at the 31st March 1915 to kr. 163,667.

With regard to redemption, the first two series pay 5 and 5 ½ % per annum of the principal, of which 4 ½ and 5 % are for interest and the rest for repayment, plus an extra instalment of 2 and 3 % of the original capital since 1908, so that all the debts will be paid off in 25 years.

The other two series pay 3 and 3 ¼ % half-yearly, of which 2.80 and 3.05 % are for interest and repayment (2.25 and 2.50 is paid in for interest account and the balance for repayment); the remainder goes to the reserve and management fund. In addition, year by year, an extra repayment instalment is fixed.

On the whole the Association is prosperous in spite of the exceptional circumstances amid which operations took place in 1914-15.

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4. THE MORTGAGE ASSOCIATION OF THE ISLANDS DIOCESE. — Beretning til kontrolkomiteen for østifternes Land Hypotek-forening om foreningens 8º Regnskabsaar 1 april 1914-31 marts 1915.

The business of this Association was satisfactory in 1914-15, despite the abnormal market conditions. Of course the closing of the stock exchange in August 1914 seriously embarrassed the Association by making it impossible to negotiate the bonds which are handed to the borrower for the sum lent.

To overcome this difficulty the Association entered into an arrangement with the Bank of Commerce of Copenhagen, under which the Bank undertook to advance 75 % of the nominal amount of the bonds, taking the latter as a pledge.

The arrangement however had no practical result, as the re-opening of the exchange made it possible to negotiate the securities on the market.

In all other points the operations of this co-operative body were normal. It should be observed that the report distinguishes between data relating to non-agricultural estates and those for the various agricultural properties, i. e. where the major part of the land is devoted to agriculture.

Of 241 applications for loans received during the year, 63 were rejected and 178 admitted, but only 149 carried into effect, for a total of kr. 765,300. Of these 149 loans, 98, for kr. 616,500, were on agricultural properties, and 51, for 148,800, on non-farm properties. This means that 80 % of the sums lent went to benefit agriculture, and the remaining 20 %, non-agricultural undertakings. It should also be noted that the average of agricultural loans is kr. 6301, and of non-agricultural loans, 2917 kr.

The following are further particulars concerning these loans :

Nature of Loan	Number	Area of Properties (Hectares)	Estimated value (kroner)	Loanable value (kroner)
Agricultural	98	2,101.67	4,161,218	3,547,000
Non-agricultural	51	22.12	902,714	691,000

The non-agricultural properties have a far higher average value than the agricultural, and evidently building sites are here in question, their average area being about ½ hectare (0.43). They do not however call for any special comment.

The average area of the agricultural properties on the other hand amounts to about 21 ½ hectares, so that they may be classed as medium-sized. Their average estimated value is kr. 42,461 per estate, while the average value taken as the basis of the loan is about kr. 36,194.

On these properties the total amount of the loans granted in 1914-15 is kr. 616,500, or about 17 % of the loanable value. First mortgages already existed, however, to the extent of kr. 1,852,454, or 52 % of such value, so that at the close of the financial year the aggregate mortgage charge on the said properties was kr. 2,468,954, being equal to about 69 % of the loanable value and 59.33 % of the estimated value, a percentage markedly below that found in the three preceding Associations of this kind.

At the close of the financial year the general position was as follows :

The total number of loans granted was 1789, aggregating kr. 7,691,000, a fairly high figure considering the short existence of the Association (8 years only).

In the following table the loans are classified according to amount:

Amount of Loans (kroner)	Number	Total Amount (kroner)
Less than 1,000	563	406,000
From 1,000 to 2,000	428	708,500
» 2,000 » 3,000	210	570,100
» 3,000 » 4,000	130	518,000
» 4,000 » 5,000	96	463,700
» 5,000 » 6,000	77	449,100
» 6,000 » 8,000	94	685,400
» 8,000 » 10,000	56	539,800
» 10,000 » 15,000	67	830,300
» 15,000 » 20,000	26	485,300
» 20,000 » 25,000	9	225,500
Above 25,000	25	1,809,100
Total . . .	1,789	7 691,100

The small loans below 1,000 kroner are very numerous, forming about 33 % of the total, but their value is not much above 5 % of the aggregate sum lent. On the other hand loans above 25,000 kr., though little more than 1 % in number, are about 20 % in value.

The 1789 loans were secured on real estate totalling about 25,150 hectares, valued at kr. 49,839,057 and loanable value kr. 42,451,000.

The sums advanced totalled kr. 7,691,100 at the 31st March 1915, to which, adding the pre-existing mortgage charge of kr. 21,646,264, a total debt is found of kr. 29,337,362, equalling nearly 60 % of the estimated value.

Distinguishing here again between farm and other loans, of the 1789 at 1st April 1915, 1192 belonged to the former class, or about 66 %, with an area agggregating 24,993 hectares, so that the average area per loan is about 20 hectares. The total of the loans was kr. 6,540,000, corresponding to an average of 5,738 per loan, and as the average area per loan was 20 hectares, we may conclude that the average amount of the loan for each hectare of farm land mortgaged is about 287 kroner.

The total valuation figure of the properties was kr. 42,331,026, and

the amount of loans 36,681,900, so that the average valuation of each estate mortgaged would be about kr. 35,765.

On these properties there already existed a mortgage debt of kr. 18,945,364, equalling about 45 % of their valuation figure. If to this we add the amount lent by the Association, the total is kr. 25,585,364 being equal to 60.20 % of the valuation figure and 69.48 % of the loanable value.

The percentage is moderate when compared with that found for the other establishments of its kind, but in any case it renders the lending institution safe against any loss, especially as, like other co-operative land credit institutions, it practices great prudence in the valuation of real estate.

This is borne out by the fact that in eight years of existence of the Association, 656 mortgaged properties exchanged hands, which, though valued at kr. 9,566,297, were sold for a total of kr. 14,347,610.

This system, and the continuous vigilance exercised by the association, explains why neither this nor the others dealt with earlier have ever sustained losses, and why their sphere of action is being continually extended, to the very great benefit of Danish agriculture.

URUGUAY.

OPERATIONS OF THE BANK OF THE REPUBLIC IN FAVOUR OF AGRICULTURAL CREDIT, DURING THE YEAR 1915. — From a report sent by the Office of Statistics aud Publications of the Ministry of Industries of the Eastern Republic of Uruguay, to the International Institute of Agriculture.

During the year 1915, the Bank of the Republic has continued to give preferential attention to the fostering of rural industry, the latter being the principal source of national wealth. There is indeed a permanent and unlimited consumption ensured abroad, at amply remunerative prices, for the agricultural and animal products of the country. It is from the development of the exportation of these products that there will result those balances favourable to Uruguayan foreign trade which will provide the necessary capital to give a vigorous impetus to the progress of the country generally.

But in order to promote the development of the agricultural and live stock industry, it is necessary in the first place to provide financial accommodation for these industries by means of credit or advances. This government function has been reserved chiefly for the Bank of the Republic, which, in determining upon the system of credit to farmers, has had to consider the requirements of the business turnover of its own establishment, which, as an issuing body, cannot keep its own resources tied up for any length of time, nor reduce the available cash required for its current oper-

ations. Recognising, nevertheless, that the allocations required by rural industry for the transformation and improvement of the respective undertakings are hardly ever realisable at short date, the following modes have been determined on for the service of secure and personal credit, in current account or bonds, or in both forms, which modes will be adopted both for permanent classification of the applicants, and for extraordinary and isolated loans.

1) Mortgage loans up to 5,000 pesos, with annual repayment of 20 %.

2) Loans to cattle breeders for fixed periods of 9 months.

3) Loans to cattle breeders for replenishment of their stocks, with mortgage security or against signature, repayable at periods up to 30 months.

4) Ordinary loans as personal credit to cattle breeders and farmers, according to their personal standing and the size of their undertakings.

5) Special loans for the expenses of shearing and harvesting.

6) Loans in connection with exhibitions, fairs and auction sales of cattle for the purchase of the latter.

7) Seed loans to farmers for sowing purposes.

By means of these different forms of agricultural credit, the Bank provided considerable sums in the expired year 1915, the amount of rural investments in this way being 18,325,389 pesos, at the 31st December. This sum is, according to the occupation of the borrowers, distributed as follows:

Loans	Amount in pesos
Stock breeders	12,335,866
Agriculturists	1,365,518
Manufacturers	1,131,848
Traders	2,214,749
Sundry occupations	1,277,308
Total	18,325,289

This same total is arrived at under the following categories:

Categories	To cattle breeders		To farmers		To manufacturers		To traders		To persons of sundry occupations		Totals	
	Number	Amount (pesos)	Number	Amount (pesos)	Number	Amount (pesos)	Number	Amount (pesos)	Numbers	Amount (pesos)	Number	Amount (pesos)
Loans up to 500 pesos	2,255	750,014	703	130,432	692	172,421	890	216,383	477	92,581	5,017	1,361,831
From 501 to 2,000 pesos	1,786	2,190,746	207	238,178	202	212,340	482	575,569	415	461,354	3,092	3,678,187
» 2,001 » 5,000 »	759	2,326,829	78	147,280	68	118,079	152	345,522	95	172,181	1,152	3,109,891
» 5,001 » 10,000 »	297	2,206,785	20	125,371	16	114,485	71	510,377	27	189,767	431	3,146,785
» 10,001 » 20,000 »	131	1,726,895	4	78,997	7	112,677	8	101,760	5	67,741	155	2,088,070
» 20,001 » 50,000 »	53	1,268,961	5	125,207	4	167,908	8	226,037	5	198,915	75	1,987,028
Of more than 50,000 pesos	8	674,668	—	—	2	150,098	1	75 101	—	—	11	899,807
Mortgage loans	296	303,122	—	454,513	—	—	—	—	—	—	—	757,035
Loans in arrears	—	887,846	—	65,640	—	83,840	—	164,000	—	94,769	—	1,296,095
Total	—	12,335,866	—	1,365,618	—	1,365,618	—	2,214,749	—	1,277,308	—	18,325,389

At the beginning of the current year, 1916, the Bank offered its co-operation to agriculture in a new form. The wheat harvest having been abundant, and the quantity of this cereal put on the market from the very outset being considerable, the demand was slack and quotations were low, so that there was reason to fear that the farmers, under the pressure of their liabilities, might be compelled to sell their produce under price, losing a good proportion of the fair remuneration of their work, in spite of the good crop obtained. Anticipating this eventuality, the Direction of the Bank resolved to grant the applications for extension or renewal of the obligations of farmers in this position, and also to allow them loans on the security of wheat in sacks stored at the Treasury warehouses, or in those of the Central Uruguay Railway.

This facility has not yet been made use of, but undoubtedly such resolution of the Bank exerted a favourable influence on the market, as there was speedily a satisfactory reaction in prices.

During the year 1915 there were observed in the special *Section of Rural Credit* of the Bank, created by law of the 19th Januay 1912 (1), after two years' indifference on the part of rural circles, some signs favourable to the development of this organism, which is called upon to perform important services in the distribution and spread of credit by means of cooperation, among persons engaged in rural industries.

The Ministry of Industries states in the report which is the subject of this article that the interest recently shown in this class of cooperative credit and in the creation of rural Funds in 1915, is due principally to the active propaganda carried on by the agricultural Inspector of the Department of Durazno, Señor Miguel H. Lazama, who was seconded by the Bank, the latter appointing a specially competent officer for the organisation of rural Funds or societies.

Up to now there are only 8 such societies in operation, distributed as follows : 2 in the Department of Florida (Sarandi Grande and Valentines) and 6 in Durazno (El Paraiso, Villasboas, Carmen, Ombues de Oribe, Feliciano y Rosell and Rius). These Societies have altogether 225 members, a subscribed capital of 2,380 pesos, an expenditure of 1,367, and a declared liability to the value of 11,715 pesos. The loans granted by the Bank to the Societies applying for them amount to 14,010 pesos and the balance at present due is 3,798 pesos. Steps are now being taken for the formation of a society in Isla Mala, with 19 members, 190 pesos of subscribed capital and 1,160 pesos of declared liability.

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THE REORGANISATION OF THE MORTGAGE BANK OF URUGUAY. — Diario Oficial Vol. XLI, No. 2952, Montevideo, 26 October 1915. (*Banco Hipotecario del Uruguay. Proyecto de Ley orgánica*). Tipografia moderna, Montevideo.

In the issue for December 1914 of this Bulletin, we published some brief data in reference to the Mortgage Bank of Uruguay and its operations.

(1) See the issue of this Review for September 1913, page 80.

Speaking of the latter we observed that in spite of all the efforts made by the Direction of the establishment, seconded by the public authorities, the Bank had not undergone all the desirable development in view of the mission it was called upon to fulfil for the benefit of the national economy. We recall, among other things, one interesting particular : out of the total amount of the mortgages contracted throughout the country, only 6.5 % appertained to the Bank, while 93.5 % went to private persons.

In view of this position the Direction of the Bank thought it had discovered one of the principal causes in the fact of the organisation not being sufficiently up to date, as the majority of the provisions which governed its operations did not allow of keeping pace with the progress effected by Uruguay latterly in the industrial and economic sphere. Therefore in July 1914, the Direction approved and submitted to Parliament a draft for a new organic law of the Bank, which, after slight alteration, was promulgated on the 15th October 1915.

The new law amplifies the functions of the institution, within the limits of the experience and exigencies of banking practice, along the lines of similar up-to-date organisations. Nevertheless the general rules in force with regard to security for loans were maintained.

In drawing up the text of this new law the legislator was guided by the constant concern to lower the rate on loans and at the same time to establish safeguarding measures which tend to ensure the financial consolidation of the institution and consequently a wider and more favourable circulation of the securities it issues.

If we examine in detail the most important modifications introduced in the organisation of the Bank, we see first of all that its capital is raised from 3,549,000 pesos — the figure fixed by the law of 1909 — to 5,000,000 pesos. The items constituting this capital are: (*a*) the 3,549,000 pesos which which formed the previous capital; (*b*) the 154,829 pesos which constituted the reserve fund of the Bank at the time of its reorganisation; and (*c*) the net annual profits obtained. When the capital stated is once completed, these annual profits will serve to form a reserve fund, and on the latter reaching 1 million pesos, they will go to the public Treasury which will use them for an extraordinary sinking fund of the external Debt (5 % 1914 certificates) the service of which has been undertaken by the Bank.

The operations of the institution in question are, in the new law, set out in 16 paragraphs. The principal ones are : (*a*) issuing securities and transferable mortgage credit bonds on its own behalf and debenture bonds at home and abroad in order to devote the proceeds to cash mortgage loans, at the same time effecting credit operations for the same purpose ; (*b*) to grant loans in the form of letters of mortgage for a period not exceeding 31 years, or in mortgage credit bonds, in current account, for a period not exceeding three years, also to grant mortgage loans and open mortgage credits in current account, both in cash; (*c*) to buy and sell cedulas, securities and mortgage debentures and bonds for account of third parties and for its own account, to accept saving deposits with or without interest up to a thousand pesos, to parcel out and sell properties for cash and by instalments for

account of third parties; (*d*) to sell or buy properties for its own account only: (1) in case of levy of distress or sale by pubilc auction of the properties mortgaged in its favour; (2) if the Bank buys properties in payment or exchange, or in consequence of settlements with its debtors or third persons; and (3) where it is a question of properties to establish premises for its chief office or branches; (*e*) to institute, in concert with the insurance Bank of the State, insurance against fire and mortgage insurance on the real property guaranteeing the loans, including in the figure to be paid by borrowers the necessary premium to cover one of these risks.

While on the old organisation of the Bank the interest on mortgage loans could not exceed by more than 2 % the rate of interest on the corresponding securities issued by the establishment, under the new law this excess need not be above 1 %.

Partial repayments of the principal lent, effected by debtors, could not be less than 10 % of the total amount of the loan granted; in the new organisation this minimum limit has been lowered to 5 %.

The maximum limit of the interest on mortgage securities which was formerly 8 % per annum, is now only 6 % under the new law.

Finally, the law under consideration, which contains 120 articles, enacts numerous provisions regarding the sale of mortgaged properties, representation and administration of the establishment and other measures, general or transitory, due to the passage from the old organisation of the Bank to the new one.

This law is the first manifestation of a government programme of economic policy in the matter of mortgages and considerable results are expected from it.

Part IV: Agricultural Economy in General

GREAT BRITAIN AND IRELAND.

ENQUIRY INTO THE RATE OF WAGES PER ACRE IN ENGLAND, 1913-1914

by W. H. R. Curtler.

Introduction.

The condition of the agricultural labourer has of late years loomed large in the eye of the public, and there have, in consequence, been many enquiries into his wages and means of livelihood.

The last Government enquiry into his wages resulted in the Report of the Board of Trade on the Earnings and Hours of Labour in 1907 (cd. 5460 1910), and since then the Central Land A sociation, the Rural League, and the Land Report of the Land Enquiry Committee, have all dealt with the labourer's weekly earnings, while the changes in them have been annually reported on in the Reports issued by the Board of Trade on the Changes in the Rates of Wages and Hours of Labour.

The condition of the rural labourer was further most fully dealt with by the late Mr. W. C. Little in Vol. V. of the Report of the Royal Commission on Labour of 1894.

Much interesting evidence on the wages of the labourer and on the quality of his work, etc. was given in the Report of the Royal Commission on Agriculture 1894-97.

There have also been innumerable enquiries into the cost of production of various crops by agricultural societies, and educational institutions, but none of these reports has dealt at all adequately with the rate of wages paid per acre, nor has there been any special enquiry into that subject, though

such an enquiry has been often asked for. It is to fill this gap that this investigation was undertaken.

One of the largest items of expenditure by the farmer is that on manual labour, amounting to at least 30 per cent of his total outlay. An examination of the accounts of 77 farms by the Royal Commission on Agriculture of 1894-7 showed that during the years just preceding 1895 the expenditure on manual labour had been 31.4 per cent of the outlay. (Report 1897, p. 437).

The cost of labour is not to be measured by the current rate of wages. If, as is frequently asserted a less amount of work is done in the day; if the hour of work have been shortened; and if the labourers are less capable and less industrious than they formerly were, the cost of work may have increased without any rise in wages.

This enquiry, therefore, has been undertaken with the object of affording to ag iculturists some guidance in their expenditure on labour, and incidentally of throwing some light on such economic points as the following:

(1) Are high wages more economical than low wages

(2) Do higher wages tend to the conversion of arable land into grass?

(3) Is the labour expenditure on large farms relatively less than on small ones?

(4) Does the modern agricultural labourer with his higher wages do more work than his predecessors?

(5) How far has the use of labour-saving machinery lessened the labour bill?

(6) The effect of keeping rotation grasses down for several years on the labour bill.

The enquiry has been conducted by circulars addressed to farmers selected mainly by the Farmers Unions within various districts. About 2000 circulars were sent out and 450 replies received.

An obstacle which has led to many of the circulars being unanswered is the well-known fact that the great majority of farmers do not keep accounts. In many other enquiries this is not of great importance. A farmer who does not keep accounts can easily answer an enquiry into the amount of weekly wages, or into the crops he grows, or the number of livestock he keeps, but no one can give his labour bill for the year, including all casual labour, piecework, and allowances, unless some accounts have been kept. Moreover, since the enquiry commenced the disturbance of business caused by the great war ha contributed to hinder its prosecution.

The investigations, however, were practically completed before the war and therefore present an account of some conditions of agriculture, at a time which will probably come to be regarded as a distinct epoch in its history.

The farmer's labour bill often includes the use of machinery, blacksmiths, and tradesmen's bills, but for the purpose of the enquiry the inclusive earnings of the labourer have been considered sufficient, including casual labour and that of women and boys.

As already said, there has hitherto been no enquiry worthy of the name into the rate of wages per acre and the statistics on the subject are scanty.

§ 1. The cost of farm labour.

Mr. J. C. Morton in his " Labour on the Farm " published in 1868 gives the rate of wages on 14 arable farms, which varied from 30s. to 53s. an acre ; with an average of £ 1. 19. 6. This figure, however, was arrived at by first deducting all the grass land from the arable at the rate of 5s. per acre, which is a very low rate. If he had deducted the grass land at the rate of 10 per acre, as has been done here, his figures for corn growing would have been almost the same as those arrived at in this research.

As early as 1863 Professor Leone Levi in " Wages and Earnings " *estimated* the average wages per acre at 27.3d. on the basis of wages of 13s. a week for men and 5s. for women and boys.

Mr. Turnbull in the Highland and Agricultural Society's Journal for 1898, estimated the cost of manual labour in the period 1872-7 at 28s. per acre both on arable land, and on permanent grass out for hay, and at the same figure in 1892-7 which, considering that wages between those periods had altered little, while the use of labour saving machinery had increased enormously, seems to show that the labourer did less work in the latter period than in the former.

Sir James Caird in 1886 before the Royal Commission on Trade put the wages per acre at 20s. for arable land, and 5s. for pasture (1).

This low figure he explained by the fact that a large proportion of arable land was in clover, sainfoin and grasses under rotation, on which the labour would be less than £1 per acre (2). The labour per acre in growing an acre of wheat was estimated to cost 28s (3).

Major Craigie (4) in 1878 estimated the wages bill for the United Kingdom at 24s. per cultivated acre, reckoning wages at 14s. a week, and in 1888 at 30s. an acre for arable land and at 9s. 6d. for pasture.

But the figures of Levi, Turnbull, Caird and Craigie, are only estimates, and are not founded on actual farm accounts, so that Mr. Morton's chiefly concern our enquiry.

The Journal of the Farmers' Club for Dec. 1888 gives the rate per acre on certain individual farms which may be compared with those stated in our enquiry.

County	Arable acreage	Pasture acreage	Wages per acre		
			£	s.	d.
Nurthumberland .	244	135		10.	11.
Gloucester	138	189		12.	2.

(1) The average wages in England and Wales for 1869 were 12. 3d. (Hasbach, Eng. Labourer p. 284).

(2) P. p. Eng. 1886, vol. XXII. Qus. 7673-5. Caird stated that the wages of labourers had fallen 10 per cent in the previous 10 years.

(3) Ibid. Qu. 7714.

(4) Ibid. Qu. 7913.

These two farms present a remarkably low labour bill.

County	Arable acreage	Pasture acreage	Wages per acre £	s.	d.
Gloucester	620	321		16.	6.
Northampton . .	101	193	1.	3.	10.
Shropshire. . . .	264	322	1.	5.	7.
Norfolk	1000	300		1.	11.
Norfolk	400	190	1.	11.	1.
Cambridge . . .	432	206	1.	9.	8.
Suffock	1110	130	2.	2.	8.

It will be noticed in these instances that the proportion of pasture land does not make much difference to the labour bill (1).

In Northumberland in 1887 on a farm of 200 acres, half arable, half pasture, wages per acre were 17s. 4d. but on another a little larger with only one fourth pasture the labour per acre was £1. 17 6d. Both of these were prize farms.

In Norfolk in 1886 on one farm where pasture comprised one-fifth of the area the wages per acre were £1. 7. 2 : on another where the pasture was one-third the wages were £2. 2. 6. per acre. On six mixed farms in Lincolnshire in the period 1883-91 the average cost of labour per acre was £1. 1. 2. (2)

The statistics given in the reports of the Farm Prize Competitions, instituted in 1870, which were published in the Royal Agricultural Society's Journal, afford some interesting information. Two periods have been taken, the first a generation ago, covering the years 1871-81, and therefore particularly interesting for purposes of comparison, in which we find that:

On eleven arable farms the wages averaged £1. 6. 10 per acre (3).

On nine mixed farms the wages averaged £1. 6. 0 per acre.

On eight dairy farms the wages averaged £1. 11. 2. per acre.

On one grazing farm they were £1. 10. 0 per acre.

And the average of the whole 29 farms was £1. 7. 7. per acre.

From these figures it would appear that the estimates of Professor Levi and Mr. Turnbull were very near the mark, for although the tendency would be to employ more labour on prize farms than on ordinary farms, better management and organisation would neutralize this.

Coming nearer our own time we have some valuable figures compiled for the Royal Commission on Agriculture of 1892-7 according to which the average wages per acre on 77 farms were £1. 5. 5.

(1) Journal of Farmer's Club, December 1888 and Nov. 1909. See also Report of Royal Commission on Agriculture 1894-6, 23, 264, 35, 548, 9041.

(2) Royal Commission on Agriculture, 1895, Vol. XVI, p. 210.

(3) By arable is meant mainly devoted to corn growing. On one farm the wages per acre had risen from 16s. in 1850 to 32s. 6d. in 1875. On another from 21s. 4d. in 1866 to 32s. 6d. in 1875.

These were mainly corn growing and mixed farms, most of which were situated in the counties of Bedford, Dorset, Essex, Lincoln, Norfolk, and Suffolk and as will be seen from the following table, vary considerably in the cost of labour per acre.

If we take the two similar classes of farms in the present enquiry, numbering 175, (131 mixed and 44 corn growing), the average rate per acre is £1. 6. 11.

Table showing annual cost of Labour per acre on 77 farms between the years 1892-95.

(From Report of Royal Commission on Agriculture, 1897. Vol. XV. p. 437).

County	Total cost of Labour	Acreage of Farms	Cost of Labour per acre	Remarks
	£		s. d.	
Beds	622	256	48. 7	Part Market gardening.
»	322	260	24. 9	Arable 76 p. c.
»	352	922	18. 6	» less than 2/3rds.
»	1,103	800	27. 7	
»	381	275	27. 9	
»	396	467	17. 0	» 74 p. c.
»	597	670	17.10	» 50 »
»	655	560	23. 5	» 75 »
»	790	540	29. 3	» 70 »
Cambs	931	565	32.11	» 72 »
»	1,176	952	24. 9	
Devon	358	245	29. 2	
Dorset	581	420	27. 8	» 40 »
»	480	686	14. 0	» 60 »
»	366	202	6. 2	» 80 »
»	576	1,122	10. 3	» 30 » and Down 30 »
»	678	840	16. 2	» 35 »
»	317	284	22. 4	» 70 »
»	956	840	22. 8	
Essex	1,785	950	37. 7	» 66 »
»	1,043	636	32. 9	
»	904	666	27. 2	» 77 »
»	257	200	25. 8	» 50 »
»	355	273	26. 0	» 56 »
»	1,127	1,190	18.11	
»	375	312	24. 0	» 70 »
»	501	345	29. 0	» 80 »
»	2,036	950	42.10	» 63 »
»	764	475	32. 2	» 90 »
»	664	350	37.11	» 90 »
»	1,376	580	47. 5	» 86 »

Table showing annual cost of Labour per acre on 77 farms between the years 1892-95. (Continued).

(From Report of Royal Commission on Agriculture, 1897. Vol. XV. p. 437).

County	Total cost of Labour	Acreage of Farms	Cost of Labour per acre	Remarks
	£		s. d.	
Essex	6,143	3,470	35. 5	Arable 86 p. c.
»	293	164	35. 9	» 87 »
Herts	649	350	37. 1	» 77 »
Hunts	313	462	13. 6	» 65 »
Lincoln	480	474	20. 3	» 50 »
»	488	320	30. 6	» 93 »
»	428	491	17. 5	» 80 »
»	321	260	24. 8	» 54 »
»	1,121	1,200	18. 8	» 75 »
»	817	790	20. 8	» 75 »
»	543	454	23.11	» 84 »
»	660	706	18. 8	» 67 »
»	1,340	869	30.10	» 73 »
»	1,523	1,600	19. 0	
»	679	635	21. 4	» 63 »
»	885	812	21.10	» 69 »
»	226	150	30. 1	» 66 »
Norfolk	598	425	28. 2	» 90 »
»	790	750	21. 1	» 88 »
»	509	300	33.11	» 93 »
»	682	490	27.10	» 61 »
»	1,110	1,200	18. 6	
»	622	640	19. 5	» 66 »
»	156	75	41. 7	
»	2,262	1,969	23. 0	
»	1,254	940	26. 8	
Northampton	221	431	10. 3	» 20 »
»	479	324	29. 6	» 74 »
»	168	316	10. 8	» 27 »
»	1,513	1,500	20. 2	
»	238	218	21.10	
Northumberland	468	494	18.11	» 20 »

Table showing annual cost of Labour per acre on 77 farms between the years 1892-95. (Continued).

(From Report of Royal Commission on Agriculture, 1297. Vol. XV. p. 437).

County	Total cost of Labour	Acreage of Farms	Cost of Labour per acre	Remarks
	£		*s. d.*	
Suffolk	947	590	32. 0	
»	403	230	35. 0	
»	892	550	32. 5	Arable 87 p. c.
»	323	260	24.10	» 34 »
»	939	590	31.10	» 55 »
»	2,062	1,750	23. 7	
»	365	265	27. 7	
»	606	473	25. 7	
Wilts	784	760	20. 7	
»	768	827	18. 7	
Yorks.	1,085	837	25. 1	» 90 »
»	549	550	20. 0	» 50 »
»	180	500	7. 5	All grass, or ling.

Average cost per acre of 77 farms 25s. 5d.

The Royal Agricultural Society's Farm Prize Competition of more recent years afford the following figures.

1907.

Total acreage	Arable	Grass	Wages per acre	
			£ s. d.	
930	620	310	1. 8. 6	
791	621	170	1. 4. 5	
290	195	95	1. 10. 0	
		1908.		
423	208	215	12. 6	Curiously low.
		1909.		
492	70	422	14. 2	
		1912.		
397	252	145	1. 10. 2	
419	379	40	1. 2. 3	
504	221	283	1. 4. 6	

In the Competition of 1913 in Gloucester, Somerset and Dorset the wages per acre on (mainly) grass farms over 200 acres, omitting down land, varied from 12s. to 32s., the latter being a dairy farm. On the two large arable farms inspected the wages were 19s. per acre.

Some estimate of the rate of wages per acre is attempted in the "Land Report" (p. 33) by Messrs Adeane and Savill, but the wages of women and children, as well as those of casual labour are omitted, so that it is incomplete.

§ 2. Nature of farms examined.

It is very obvious from these figures and from those collected during the enquiry, that the rate of wages per acre vary enormously even on farms of the same class, e. g. corn growing; owing to many causes such as the nature of the soil, the cropping, the season, the management, the share of the

GEOGRAPHICAL TABLE, — *Showing counties examined, the number of*

County	No. of Mixed Farms	Acreage	No. of Stock Farms	Acre
Bucks	1	486	6	2
Cheshire	3	663	—	-
Cornwall	12	4,015	2	
Derby	3	714	1	
Dorset	2	1,218	—	-
Durham, Northumberland & Westmoreland	10	4,047	8	3
Gloucester	—	—	2	
Hereford & Worcester	1	354	3	
Kent	3	1,203	1	
Lancashire	—	—	—	-
Leicester & Rutland	10	3,125	9	
Lincoln	6	3,028	1	
Norfolk	13	7,054	—	-
Northampton	9	5,163	1	
Notts.	3	942	—	-
Oxford & Berks	19	12,107	1	1
Shropshire	10	4,091	5	2
Somerset	14	4,288	7	2
Surrey	1	440	—	-
Sussex	6	4,575	5	2
Warwick	4	1,526	9	2
York	1	400	—	-
Total	131	59,437	61	2

ss of farm in each county, and the acreage, in each class examined.

No. Dairy arms	Acreage	No. of Corn Farms	Acreage	No. of Fruit & Hop Farms	Acreage	Total Farms	Total Acreage
7	2,400	—	—	—	—	14	4,952
3	505	—	—	—	—	6	1,168
2	658	4	1,360	—	—	20	6,609
2	845	—	—	—	—	6	1,830
1	225	—	—	—	—	3	1,453
1	256	1	265	—	—	20	8,136
					Nearly the whole of these farms are in Durham. Also one « Potato » farm of 190 acres.		
8	2,572	2	1,710	1	122	13	5,285
—	—	—	—	17	3,638	21	4,680
—	—	—	—	20	8,821	34	10,247
2	398	—	—	—	—	2	398
					Also 4 « Potato » farms comprising 948 acres.		
3	781	—	—	—	—	22	6,755
2	—	14	10,483	—	—	21	13,989
					Also 4 « Potato » farms comprising 1,464 acres.		
2	474	16	7,729	1	570	32	15,827
2	550	—	—	—	—	12	6,313
—	—	1	730	—	—	5	1,672
1	281	—	—	—	—	21	13,938
1	300	1	481	—	—	17	7,355
21	5,255	—	—	—	—	42	11,735
1	250	—	—	—	—	2	690
11	4,904	2	1,174	—	—	24	12,932
4	1,262	1	358	—	—	18	5,864
—	—	1	600	—	—	2	1,000
72	21,546	44	24,890	49	13,151	No.	Acreage
					Add Potato Farms	9	2,602

Total number of Farms examined . . . 366
Total acreage of the said farms 145.430

farmer and his family in the manual labour etc. etc., On this account it has been suggested that any enquiry is useless, and that no trustworthy figures can be arrived at. But it is submitted that, by taking figures from a considerable number of farms, the average wages per acre may be stated with considerable confidence.

It is well known that on small farms the farmer and his family do a large proportion of the manual work so that in order to eliminate this factor as far as possible, account has been taken mainly of large farms where the farmer's work must be, as a rule, that of management and superintendence. As far as possible, except in the case of dairy, fruit and hop farms, farms under 2000 acres in size have been excluded.

The farms examined have been divided into five broad classes :

Corn growing,
Stock rearing and feeding,
Dairying,
Mixed,
Fruit and Hops,

the latter being sub-divided where it is possible to separate the fruit and hops from the arable and grass land which has no fruit or hops on it, and the fruit from the hops. There is also a small class for farms where potatoes are largely grown, which has been kept separate owing to the extra amount of labour employed in their cultivation.

It is very rare, of course, to find a farm devoted solely to a particular branch of agriculture, so that they have been classified according to the predominant character of each ; and where any such feature is absent they have been placed in the " mixed class ".

The corn growing farms are mainly situated in the great arable counties of Lincoln and Norfolk ; the stock rearing and feeding farms in the north of England and in Bucks, Leicester, Somerset, Shropshire, and Warwick ; the dairying in Somerset, Bucks, Gloucester, and Dorset ; the fruit and hops in Kent, Hereford, and Worcester ; but farms in other counties have furnished particulars, as may be seen in the succeeding table.

§ 3. Average earnings per acre.

The following are the average wages paid per acre in the different classes of farms with the number or farms examined in each class. The term " wages " including all earnings and allowances, such as free cottages, potato grounds, milk, coal, etc. etc. and also including all the manual labour on the farm, regular and casual, and that of women and children (1).

(1) See Appendix A. and Appendix C.

The average ratio of earnings to wages has apparently not changed since the time of Arthur Young, the former being then and now about 17 % higher than the latter. See Statis. Soc. Journ. 1903 p. 288.

Corn growing	44	1. 7. 10
Stock rearing and feeding	61	1. 0. 0
Dairying	72	1. 6. 8
Mixed	131	1. 6. 6
Fruit and Hops (1)	49	5. 4. 2
do. after deducting land with no fruit or hops.		11. 14. 6
Fruit only	9	11. 4. 0
Hops only	6	24. 14. 10
Potatoes	9	2. 15. 6

And the average per acre for 508 farms in the first four classes, that is leaving out the exceptionally expensive fruit, hops, and potatoes is £1. 5. 7.

In the returns of Fruit and Hop Farm the amount of wages paid for fruit and hops separately are unfortunately nowhere stated in the returns sent in ; but on nine farms where fruit is grown largely and no hops, the wages for the arable and grass have been deducted from the labour bill, at the mixed farm rate, thus arriving at a cost of £11. 4. 0. per acre for manual labour on fruit plantations.

On six hop farms by the same process it is found that the manual labour per acre comes to £24. 14. 10.

In order to arrive at the cost of manual labour in corn growing per acre thirty Norfolk and Lincolnshire corn growing farms have been taken and from them has been deducted the wages paid on the grass land at the rate of 10 per acre (2) from the total wages bill, with the result that the cost of labour in corn growing, works out at £1. 14. 0 per acre.

It may be said therefore, assuming that the average wages of the labourers are £1 per week, that, roughly, grass land takes one man per 100 acres, and corn land three and a half.

In Cornwall it is to be noticed that the rate of wages per acre is much lower than the average. On 20 farms, of which twelve are mixed, 4 corn growing, two dairy, and two stoek farms, the average rate per acre is 18s. 8d. as compared with an average of £1. 5. 7. for the whole of the farms examined in this enquiry.

This is ascribed by a prominent local farmer to the light and easily worked soil, the large proportion of sheep which require little labour, the small amount of draining and ditching required owing to the country being full of hills and vales, the "good workers" for which Cornwall has a reputation, (3) and the fattening of cattle by summer grazing instead of winter

(1) Here the average per acre is taken for the *whole* farm inclusive of land without fruit or hops.

(2) This is the figure stated in more than one place by writers in the Royal Agricultural Society's Journal.

(3) The average weekly earnings of the ordinary labourer in Cornwall for 1913 were £ 1. 0. 5. See Table, Appendix B.

stall feeding, owing to the favourable climate; but the chief cause is the prolongation of temporary grass layers as noted by Mr. W. C. Little in his report on Cornwall given before the Richmond Commission (1882 vol. XV. p. 12).

In connection with this point the northern counties are sometimes quoted as owing their low rate of wages per acre to their large proportion of rotation grasses which are kept down for 3 or 4 years, but their large area in permanent grass also keeps wages down, so that Cornwall may more usefully, be compared with the Counties of Berks and Oxford where the proportion of arable land to permanent grass is very similar.

County	Arable	Permanent Grass	Rotation Grasses	Percentage of arable in Rotation Grasses	Wages per acre — £ s. d.
Berks . .	174,528	174,277	27,038	15 ½	
Oxford .	199,048	211,638	34,524	17	1. 3. 1
Cornwall .	311,772	299,923	148,513	47 ½	18. 8

§ 4. Machinery and the Labour Bill.

An interesting point which arises in connection with this enquiry is, how far the use of labour saving machinery reduced the labour bill? Although the advent of modern machinery, such as the reaper and mower, dates from the middle of the nineteenth century, its general use has been the growth of the last generation (1). Where one man had a self-binding reaper in 1880 twenty have one to-day, and the same may be said of most of the other labour saving machines. One would therefore expect the labour bill to be largely reduced in this period in spite of the rise in wages, unless more intensive farming had demanded the application of more annual labour to the land. But it is admitted that farming is not so careful and thorough as it was thirty five years ago. With the increase of foreign competition about 1875 and the rise in wages, began the starvation of English Land. Mr. Spencer, one of the Assistant Commissioners in preparing the Report on Labour of 1894, says "the land is less well and carefully tilled than it used to be". Another Commissioner says "the land is labour starved"; and Mr. Little stated that "farmers leave undone all work

(1) According to the Census of 1851 there were then only 55 owners of agricultural machinery, in 1861 there were 236 together with 1205 persons employed in working it. In 1871 these two classes were amalgamated, and the total number of proprietors and attendants was 2.160. (Hasbach op. cit. 256 n.) In 1881, 4,260, 1891, 4,675, 1901 6,545. In 1911 the number was 7,346, but these figures do not represent the actual rate at which the use of machinery has increased since many farmers use their own machines. The Report on the decline in the Agricultural Population (p. 14) says " the main cause of the reduction of the labour bill is undoubtedly the use of labour saving machinery ".

which can be abandoned ". (Royal Commission on Labour, vol. V, pp. 39 and 40 Cd. 6894.

§ 5. Has production increased ?

It is fair to add, however, that in the opinion of some good judges of today more brains are put into the business than formerly, and though there is less " polish „ in farming and holdings do not look so " smart ", the essential business is as well done. Yet, while science has been of more and more assistance to agriculture, the produce of the land is little greater than it was thirty years ago.

In the decennial period 1885-94, the first period in which such statistics were taken, the average yield per acre, according to figures supplied by the Board of Agriculture, in England and Wales was :

	Bushels.	
Wheat	29.35	
Barley	33.07	
Oats	40.58	
Beans	25.79	
	Tons.	
Potatoes	5.94	
Turnips	12.42	
Mangolds	17.48	
Hay - Temporary	28.13	cwt.
» Permanent	24.34	»

In the period 1904-13 the average yield was :

	Bushels.	
Wheat	31.54	
Barley	33.07	
Oats	40.84	
Beans	29.51	
	Tons.	
Potatoes	6.19	
Turnips	13.04	
Mangolds	19.51	
Hay - Temporary	29.30	cwt.
» Permanent	23.95	»

It cannot be contended that these figures show any substantial increase of production.

It was stated by Sir James Caird in 1880 (1) that it then involved 2 ½ days of the labourer's time to raise a bushel of wheat, whereas in 1894 Mr. Little, the well known Statistician, showed it would only be half that estimate, or 1 ½ days, owing to the great increase in the use of machinery, and today the estimate should be less owing to its still greater use. In the United States it has been calculated that the manual labour saved, in the production of the 15 leading crops, by machinery is 54 per cent. The labourer's *cash* wages in (2) 1880 were estimated by Mr. Druce at 14s. 2d. and by Mr. Wilson Fox (3) at 13s. 2d., and the mean of these two estimates is 13s. 8d. Today, 1914, the average cash wage is 18.6 (4) or an increase of about 30 per cent. But the labour saved by machinery is about 50 per cent, and the land is not so carefully tilled as it was, and it is often "labour starved"; we should therefore expect the labour bill to be much less than it used to be, but this is by no means the case. There is no other conclusion, then, that the labourer does less work for more money than he did a generation ago. And this conclusion is strengthened by this enquiry, which shows that the average labour bill per acre has altered little. This apparently throws some doubt on the theory that the higher the wage the better the work (5).

§ 6. Causes which tend to lessen output.

That a man well paid, and therefore well fed and nourished is, other things being equal, able to do more work than one who is not, is incontestable. But other points enter into the question. Emigration has recently deprived us of a large number of the best of our labourers. In 1911 33,000 adult male agriculturists left our shores, the bulk of them agricultural labourers (6), and those who emigrate are the most energetic and enterprising, who undergo a further sifting when they reach the new coun-

(1) Farmers Journal, Nov. 1909, p. 885. In 1820, Caird said, it took 4 days of the labourers' time to raise a bushel of wheat.

(2) Royal Agricult. Soc. Journ. 1885.

(3) Statistical Soc.s Journal, 1903.

(4) According to the Rural League Enquiry of 1912-13 the average cash wages were about 17 shillings; by Jan. 1st 1914 wages had risen about 16d. (See Report Cd. 7635) and Appendix 2.

(5) In the report of the Royal Commission on Agricult. 1894-7 the quality of labour was much discussed, and the evidence was contradictory, though so great an authority as Sir I. B. Lawes said emphatically that the quality of labour was not so good as formerly, because the labourers, being better off and therefore more independent, took no interest in their work. But on this question we must remember the "laudator temporis acti". — On the whole the bulk of the evidence favoured the view that the labourer did less work in a day than formerly and that owing to a variety of causes labour has been more costly and less efficient, so that the average labour bill of an arable farm is at least 25 % higher at the present time than it was some twenty years ago.

(6) "How the Labourer Lives", by Seebohm Rowntree, p. 20.

tries ; the failures returning to England. The prevalent Trades Union doctrine of the limitation of output has no doubt spread to the agricultural labourer. And, now that education has awakened their faculties, many who are not well paid do not see why they should work their best for such poor wages as they receive.

Many farmers say, and perhaps with truth, that allotments, though beneficial in keeping the labourer on the land, often cause him to reserve much of his strength for the cultivation of his own land.

These causes have tended to lessen the increased output of labour which we should naturally expect from better wages, though this enquiry shows that, other things being equal, the well-paid man is more economical than the ill-paid.

On the 29 farms investigated in 1871-81 (see above), of which only one was a grazing farm, the average wages per acre were 27.7d. On the 308 farms in the period 1913-14, of which no less than 61 were grazing farms, the average was 25.7d. On the arable and mixed farms the average per acre in 1913-14 is higher than in the period 1871-81, but lower on the dairy farms. Again the 77 farms examined in 1895 by the Royal Commission on Agriculture showed a rate of £1.5.5 per acre.

In spite, therefore, of the vastly increased use of labour saving machinery and in spite of the ever increasing assistance of science and of a generation of compulsory education, the labour bill per acre is much the same as it used to be a generation ago, and the produce of that labour shows little improvement.

§ 7. Ratio of cost of labour to profits.

The transfer of a large proportion of the profit of the landlord and the farmer to the labourer, which has been so marked a tendency in recent years, however beneficial to the labourer, has apparently not improved farming nor increased the food supply of the nation to any appreciable extent. Mr. W. C. Little, writing in 1894 said : "It is no exaggeration to say that in the quarter of a century which has elasped since 1867," which he regards as a distinct epoch in the social and economic history of our rural population "a quiet economic revolution, accomplished with little aid from legislation, has transferred to the labourers from one third to one fourth of that profit which the landowners and farmers then received from the cultivation of the land." (Report of Royal Commission on Labour, 1894, Cd. 6894, p. 2).

In the Parliamentary Report of 1897 (1) many instances are given of the increased ratio of the cost of labour to gross profits of which the following is a typical instance :

(1) XV. App. iii. Table viii.

County	Acreage of farm	Period	Average cost of labour per acre	Ratio of cost of labour to gross profit per cent
Suffolk . . .	590	1839-43	26.2.	49.03
		1863-7	28.4.	54.07
		1871-5	35.2.	59.48
		1890-4	33.0.	133.50

The above figures are worthy of careful consideration by our social reformers.

Then there is the question of the relative amount of labour employed on large and on small farms. It is generally said that on the former, economy of management and superior organisation diminishes the labour bill, and the Report of the Census of Production 1912 (p. 24) shows that on farms of from 50 to 300 acres (of which the average size is 125 acres), the number of persons employed per 100 acres is 3.7, whereas on farms over 300 acres (average size 361 acres), the number employed per 100 acres is 2.9. It is a pity that in these figures the first class was taken from farms between 50 and 300 acres as some farms of between 50 and 100 acres are often little more than what is technically known as "small holdings" on which the labour employed is well known to be relatively very large. It would have been better to have divided this class into two or three, so that the small "farms" could be separated from the small "holdings."

In this Enquiry thirty six "mixed" farms or over 500 acres each, some containing over 1000 acres, have been taken and it appears that on them the rate of wages per acre is £1. 4. 3. (1) while on seventeen "mixed" farms of between 200 and 250 acres each the rate is £1. 4. 4.

No doubt, on the smaller class the manual labour of the occupier and his family is to be considered more than on the larger, and as this is not included in the above rates per acre, it would somewhat swell the labour bill on the smaller farms.

But the manual labour of a farmer on a holding between 200 and 250 acres in size, such as we have taken for purposes of comparison, would not be a large item, so that the similarity between the two rates is very striking. Are we to conclude that more intensive superintendance on the smaller farms counter-balances the advantages of working on a big scale on the large farms?

If this is the case, then economically speaking, the large farm must justify its existence by proving that it produces more per acre than the small

(1) On 24 "corn-growing" farms of over 500 acres the rate per acre is £ 1. 5. 6. Unfortunately the returns of corn-growing farms of between 200 and 250 acres are too few for purposes of comparison.

or the moderate sized. But as far as we know there are few statistics compiled on this point (1).

(To be continued).

(1) The report on the Census of Production (1912, Cd. 6277 pp. 23 and 25), gives some slight information on this point. "The average number of cattle kept in proportion to area appears to be largest on farm of from 5 to 300 acres, while the density of the sheep stock rises as the size of the holding increases and is more than twice as great on the large farms as on those of the smallest size. The very small holding is greatly superior in regard to pigs and poultry. In dairying, while the small holdings, apparently, keep more cows in proportion to acreage than the larger, the production of milk per cow is less, yet the milk produced per 100 acres is far greater on small holdings.

The Journal of the Royal Statistical Society, 1886, gives some figures which seem to confirm the above.

No. of Animals kept per 100 acres.

Class of Holding acres	Cattle	Pigs	Sheep
1-5	29.9	49.8	29.9
5-20	31.4	22.1	31.6
20-50	27.1	12.5	44.3
50-100	23.1	9.1	50.9
100-300	18.5	6.7	62.9
300-500	14.7	5.1	84.8
500-10,000	11.2	4.2	103.2
over 1,000	8.2	2.9	107.8

FRENCH MOROCCO PROTECTORATE.

THE AGRARIAN POLICY OF THE SHERIFFIAN GOVERNMENT DURING THE WAR.

OFFICIAL SOURCE:

REPORT (MADE TO THE CHAMBER OF DEPUTIES) by Mr. LONG, deputy, on behalf of *the Commission of Foreign Affairs Protectorates and Colonies* instructed to examine the bill authorising the Sheriffian Government to increase to 242 million francs the amount of the loan of 170,250,000 francs authorised by the law of the 16th March 1914 for the execution of public works and repayment of the Maghzen liabilities.

The importance of the agricultural question in Morocco is fully realised on analysing the statistics of customs duties: the produce of the soil alone forms more than 95 hundredths of the total exportation, in the average year.

There can be no question of attempting the full agricultural development of the country within any short period, as it would be the work of a lengthy future, but it is a duty straightway to pave the way for, stimulate and accelerate the growth of this source of public wealth.

An initial programme for which two million francs was appropriated comprised plans and works of irrigation, the reclamation of some marsh lands and the creation of gardens and test fields.

The organisation of the departments of agriculture in the course of the year 1914-1915 has enabled this programme to be overhauled and extended to certain services of immediate necessity and work of special urgency.

It is of interest, before briefly examining this new programme, to cast a glance on the work of these services at their inception.

§ 1. THE AGRICULTURAL WORK OF THE PUBLIC SERVICES.

They have already to a great extent carried out the first duty of agricultural survey and study of the features of each region, analysis of soils, commercial and industrial reports on principal products, and attentive observation of native cultivations, spontaneous flora, and breeds of domestic

animals. These investigations allowed of giving circumstantial replies to enquiries from private sources, and furthermore, by determining the economic potentialities of the territories to be served, they make a highly valuable contribution to the study and plotting out of roads and railways. In addition, the installation of 39 weather stations has for three years past ensured a supply of daily reports on the different climatic factors.

The public administration, from the outset, took to itself the duty of popularising the best methods for the protection of cultures and live-stock against diseases and insect pests. The method adopted was the distribution of pamphlets in the Arabic language, and above all practical demonstrations calculated to overcome the prejudices of the natives. Thus the technical departments have had many opportunities of making clear the effectiveness of sulphating seeds against smut and bunt in grain, pruning and cupric treatment against fumago, which causes widespread ravages in fruit plantations, and sulphur against the oidium to which market garden cultures are predisposed by the hot and moist climate of the coast, etc. Veterinary surgeons attend on the spot with a view to combating epidemics of tag-sore, foot-and-mouth disease, pyroplasmosis and anthrax as soon as outbreaks of the same have been reported.

In like manner the inspectors of the livestock breeding department give instruction in some veterinary practices to the native assistants who act as their intermediaries towards the tribes and who in their turn diffuse many useful notions.

Generally speaking, the Moroccan tiller of the soil gives attention to the advice furnished him ; he lacks neither observation nor a desire for betterment, and everything suggests that by proceeding patiently and gradually, so as not to come into conflict with his ingrained habits and traditions, it will be fairly easy to bring him round to agricultural views much more in keeping with his interest and calculated to benefit the entire country. In various localities the olive-tree pruning work taken under its charge by the public administration has already allowed of training up gangs of Arab workmen, whose work will be an example to others.

The extension of production however depends above all on two other factors : the extension of the area under cultivation and the increase of yield per unit of surface.

The bringing under cultivation of lands left to run wild during periods of anarchy and the clearing of waste lands extends as the protectorate is more and more organised. Agriculture thrives in its guaranteed security, when the rural populations are left to work unmolested.

With regard to the increase in the yield of cultivations, this question in Morocco requires consideration from two different points of view, according as the native or the European element is in question.

With respect to the native element, it is beyond dispute that an increase in the yield can be obtained by the immediate adoption of simple but strong and substantial tools, and of methods, manipulations, and modes of work the effectiveness of which has been put to the test amid the similar environments of Algeria and Tunisia, and for which there was no need to

resort to lengthy experimental investigations. The use of the light ploughs employed in the plains of Setif and Bel-Abbes, the utilisation of the harrow, of seed cleaners, winnowing machines, scythes and rakes for harvesting the natural hay, etc., the adoption, in short, of articles of equipment of robust and strong make, easily repaired on the spot—this is the endowment with which it is an immediate concern to provide native agriculture until such time as educational advances render further progress possible.

In this direction the departments of agriculture may render useful service within the limits set by the annual appropriations in the budget of Morocco, with the assistance likewise which must be given them by the native provident societies now being created. Theoretically, indeed, it would be possible to conceive a wider and more attractive programme, but in a Mussulman environment progress is only real and permanent if it is the result of patient and gradual efforts calculated to give rise to conviction and confidence.

The question is different as regards European colonisation, which, generally speaking, is already won over to modern ideas. In this case the mere diffusion of accepted current ideas cannot suffice, and the public authorities are called upon to pave the way for the future by undertaking for their account and ensuring by their own resources those experimental investigations which will lead to the introduction of intensive cultivation, and which private initiative lacks both the time and the financial and technical means to undertake itself.

Trial Fields. — These considerations induced the Direction of Agriculture to create three " trial gardens " at Rabat for the temperate coast zone, and at Meknes and Marrakesh for the eastern and southern regions, the climate of which is clearly continental and demands particular investigations. In addition to these establishments, the object of which is to concern themselves more specially with kitchen garden and fruit cultivation, it was indispensable to provide large farms where crops and livestock breeding should be judiciously combined in the same way as on private farms, in order to determine the guiding lines to be advocated in the matter of cereals, industrial plants, livestock and irrigation. While colonists will hence obtain information of the utmost utility for the organisation of their farms, the natives will be instructed in the methods to adopt. A first large farm of this kind is to be created in the region of Sebu.

Remount Stations. — In a horse-riding country, first penetrated by military forces, horse-breeding naturally claimed attention first and foremost. At the outset the French officers organised the stud service. They were able to bring to bear on this matter the useful knowledge which they possess. Experience in Algeria and Tunisia long since made clear the necessity of improving the Barbary horse by an infusion of Arab blood, and in Morocco no hesitation is possible as to the desirability of resorting to Syrian and Arab-Barbary stallions. At the present time the stud service possesses 300 breeding stallions, and the confidence of the rural population grows day by day, so that the number of mares served at the serving sta-

tions of the State was about 10,000 in 1915, as against 6,000 in 1914 and 2,700 only in 1913.

Miscellaneous Services. — The organisation of a veterinary department, which is imperative at Casablanca for the inspection and treatment of animals intended for export, will entail the construction of a building with stables, grounds, etc., and installation for the preparation of vaccines, cereals, etc., and on the other hand the establishment of a laboratory where tests of all products utilisable from the agricultural point of view will be carried out.

Irrigation. — As regards irrigation work, which is of particular interest, M. Imbeaux, chief engineer at Nancy, was appointed to investigate, as requested by the Spanish Government and in concert with the delegates of the latter, the best mode of utilisation of the waters of the Moulouya and the rules for their distribution between the two zones. It would be difficult for us here to analyse the very interesting report he has presented and set out the scheme accompanying it. One need only record the fact that fundamental data are now available on the question, the solution of which, though it may still have long to wait in view of the sacrifices it would involve, is of the utmost importance for the future of Eastern Morocco.

Until such time as the above solution is brought about, it is proposed to establish on a tributary stream, the Zegzel, the flow of which even in summer remains pretty considerable, a barrage with supply channel which will suffice for the irrigation of a zone 5,000 to 6,000 hectares of the plain of Trifas. The construction of this work is estimated not to cost above one hundred thousand francs. The administration also proposes to erect, at suitably chosen points in those parts of Morocco most adapted to intensive cultivation (Doukkala, Chaouia, valley of Sebu, Beni M' Tir, Sais), works of the same kind, likely to ensure, without excessive loss, the development of comparatively extensive tracts of land. There is moreover contemplated the creation of agricultural unions which would take upon themselves the costs of construction and upkeep, receiving only subsidies from the Protectorate, the financial drain upon which would thus be less heavy.

Finally, it is proposed to create cattle ponds in parts where livestock breeding would become very prosperous the moment there were the possibility of watering the cattle.

Reclamation. — The work of reclamation of the marshes of Oued-fez, which was a malarial bed dangerous to public health in the immediate vicinity of the city, has been taken in hand.

The administration also proposes to carry out certain partial reclamations required for the sanitation of some of the most fertile parts, those very ones namely where the first experiments in irrigation are to be undertaken.

Settlement Centres. — Finally the creation is in progress of some settlement centres in the richest regions of the country (R'arb, Beni-Hassen, Chaouia, Doukkaka) where a fairly large number of farmers are already coming to settle.

The equipment of each such centre, comprising a rough water-supply installation, some rudimentary town works and the construction of a common house, will cost 100,000 francs, thus representing an outlay of one million francs if the operations be at first confined to building ten centres.

The Protectorate does not propose to use this credit in order to enter upon the path of artificial creation of facilities by allotments of State lands. The following is what is intended :

As and when the country is pacified and administratively organised, and as and when its system of roads is developed, the need arises for facilitating the construction, at the best served points of the interior, (generally in the vicinity of stations, or at the junction of main roads), of villages, where, little by little, traders and small manufacturers, Europeans and natives (grocers, restaurant keepers, smiths, etc.) will be brought together. These are, on the other hand, points to which the movement of small farming settlers may be directed, especially with a view to a market garden cultivation which would be insufficient for town populations. It is intelligible that the Protectorate should endeavour to facilitate the creation of these centres, which often grow to be important markets, forming a point of contact between the native and the European element and contributing to the economic development of the country.

§ 2. Forest policy.

The Protectorate has rejected most resolutely the system of working by concessions to private persons, being of opinion that the utilisation of the forests of Morocco must be attended to by the State.

Hence it is the more indispensable that the corresponding department should be in a position to fulfil its duties.

Let us see briefly how it has endeavoured to do so hitherto :

The department of waters and forests, created in 1913, could not be organised until 1914, when the first technical agents placed at the disposal of the Moroccan Government arrived.

Although this staff was very limited (two superior agents and about twenty head keepers and keepers), the results of the first year of forest management (1914-1915) are highly encouraging.

The receipts, indeed, for this first year, amounted to the sum of 240,496 pesetas hassanis, while the expenses were only 268,180 pesetas hassanis. These receipts, which result from the sale of tannin, charcoal, timber, etc. are only provided by a very small part of the forests of Mamora, Sehul and Camp-Boulhaut, the only ones which have been regularly worked since 1914.

The cork forest of Mamora covers 130.000 hectares. Its area is twice that of the cork forests of Tunisia, and is equal to one half the area of the forest domains of the same species in Algeria. In 1913 it seemed bound to undergo inevitable ruin ; the riparian natives stripped the trees as they stood, in order to supply tannin to the tanners of Rabat and Salé, and thus

every year killed a considerable number of splendid cork trees. Those trees which escaped their vandalism were ruthlessly exploited by the charcoal burners.

The forest department was able to put an end to this devastation by taking the place of these dangerous workers, and employing them under Government supervision to make, from decaying trees stripped of their bark or mutilated, the tannin and charcoal required for the needs of Rabat and Salé. The administration thus uses for the protection and regeneration of the forest the very persons who destroyed it before.

The method used has apparently been fully successful, and the Mamora, as well as the forests of Sehul and Camp-Boulhaut, may be regarded as safe from any fresh devastation.

Once it had the situation in hand, the forest department actively pushed forward the working and utilisation of these forests of cork trees throughout the western part of Mamora, independently of the work of regeneration of the ruined woods, important operations for exploiting the cork have been carried out: 120,000 trees were thus dealt with in 1914 and 1915 in Mamora and 23,000 in the forest of Camp-Boulhaut.

Furthermore, 101 kilometres of cleared glades forming carriageable roads, 30 metres in width, intended both to protect the Mamora forest against fire and to provide access for working it, were cut throught the forest from north to south and from east to west.

Finally there was appointed without loss of time a working and supervising staff in the centre of the cantons to be developed : barracks, intended to accommodate six families of persons engaged in this work, were put up near Kenitra ; three groups of forest houses were put out to contract in 1915; four further groups will be put out in 1916. Each house contains three rooms for the family of the forest keeper, a room for guests and visiting superiors, lodgings for native assistants, a yard surrounded by high walls, containing the stables, the sheds, the tool workshop, the oven, etc. All these arrangements are necessary owing to the conditions of living and the isolation of the keepers, and in addition water supply from springs or by boring wells is provided.

Various other works of improvements have also been carried out : forest repopulation and sowing, delimitation, etc.

The administration is of opinion that the development of the superb domain formed by Mamora and the other cork forests in the region of Rabat, which will yield the State several million francs yearly revenue, may be carried out in five or six years.

The political situation of the Atlas has not yet allowed of contemplating the exploitation of the fine cedar forests lying south of Fez and Meknes. Probably nevertheless regular exploitation will be set up as soon as the resources in the way of technical staff allow.

SERBIA.

THE DISTRIBUTION OF LANDED PROPERTY.

OFFICIAL SOURCES :

Статистички Годишњак Краљевине Србије за 1905 (Statistical Year-book of the Kingdom of Serbia for 1905). Belgrade, 1907.

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JOWANOWITSCH (D. M.) : Die serbische Landwirtschaft (Serbian Agriculture). Monaco, 1906.

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BELLIN (U.) : Etude sur la propriété foncière en pays musulmans et spécialement en Turquie (A study of land property in Mussulman countries especially in Turkey). Journal Asiatique, V Series. Paris, 1861-1862.

Нинчић (Д. М.): Питање о својини земље у Срба под Турцима (The land property of Serbians during the Turkish dominion). "Dello", January-February 1913.

Serbia is essentially an agricultural country. It indeed appears from the census of 1900 that out of the 2,492,882 inhabitants, 2,099,719 lived by agriculture.

Statistical data are not yet available for the new territories, but it may straightway be stated that the percentage of the agricultural population will at least remain the same, if indeed it does not increase.

Having regard to the predominating importance of agriculture in Serbia, it is expedient to study all the factors which have influenced its development, favourably or unfavourably.

This study will bring out some interesting facts, and will enable us at the same time to forecast the further development of Serbian agriculture.

Among the causes which have acted and still act to-day on agriculture in Serbia, one of the principal ones is the distribution of property in land.

The latter really influences the selection and distribution of the various cultivations, the greater or less importance attached to stock breeding, and the more or less intense system of cultivation adopted. The study of the distribution of property and the influence exerted by it on the development of agriculture would however not be complete if the factors which gave rise to this distribution were left out of account. These factors are historical, natural, economic and social. The historical factors are the most important, having influenced the distribution of property until the second half of the last century, that is to say, the time when the other factors began to come into operation.

§ 1. Land property in the VII-XV century.

The land system in the old Serbian State was, just as elsewhere for that matter in the same period, the feudal system; consequently the land belonged to a limited number of persons and was almost entirely tilled by the serfs of the soil. Small and medium properties were, then, quite the exception. Large land-holders were the State, the feudal lords, the Church and the convents. To the King there appertained the greater part of the forests, and also the major portion of the lands. Feudal lords possessed, in respect of the lands granted them by the King, the right of "bashitina" and "pronia". The former, which was the first to make its appearance, presents all the characteristic features of the right of ownership; the holder, indeed, has the absolute and unlimited use, being even able to alienate, but with the consent of all the male members of full age in the "zadruga" (family community). The consent of the King to alienation was only required in exceptional cases, as for instance when the alienation was in favour of a church or a convent, as the "bashitina" of churches and convents was free from return services or servitudes of a military character. The "bashitina" is furthermore hereditary, and only when the holder dies without leaving descendants to the third degree does the "bashitina" revert in law to the King. The feudal lord can only be expropriated for grave offences, as for instance high treason. In turn, however, he is bound to render military service and pay the taxes. In addition to personal services, the feudal lord is bound to place a given number of soldiers at the disposal of the King, to provide for their armament and maintenance, and lead them to battle. The taxes so-called "soche", were fairly light: one bushel (about 0.40 hectolitre) of wheat for each family of farmers.

The feudal lord was further bound to make gifts to the King on various occasions, as for instance when the son or daughter of the King married, when the King built a castle, a convent, and the like.

The "pronia", created later than the "bashitina", but arising like the latter from rewards and gifts granted by the King for special services of a military or administrative nature, presented the features not of ownership but rather of usufruct; therefore it is a personal right which ceases on the

death of the holder. In practice, however, as the direct descendent almost in every case takes over the functions exercised by his ascendant, this usufruct is transmitted and assumes an almost hereditary character. It is as well however to bear in mind that this only takes place by virtue of fresh royal concession.

The " bashitina " of churches and convents likewise originated in gifts granted by the Sovereign on various occasions ; as for instance when the King abdicated and entered a convent, or when any of his sons or descendants, not heirs to the throne, became monks. It is however distinguished from the " bashitina " of feudal lords by the following rather important feature : that its serfs were exempt from military service. This privilege led to the direct consequence that the lands of the feudal lords were often deserted by the tillers of the soil who fled on to ecclesiastical lands ; so much so that King Dushian was compelled to promulgate a law containing severe penalties for such desertion.

There are no documents explaining the existence, very limited though it is, of small and medium properties ; but it is probable that they result from gifts granted by the feudal lords to the serfs who thus came to be landowners free from all obligations and servitudes towards their lord, and only bound to do military service and pay taxes.

All the lands dealt with hitherto were divided into small plots and cultivated by the serfs ; the latter, as in the rest of Europe, were tied to the soil and could not leave it save in exceptional cases and with the authority of the King. They nevertheless possessed the right during their lifetime of always cultivating the same land, and at their death of transmitting this right to their descendants. The serf was bound to furnish to the feudal lord $^1/_{10}$ of the crops and to pay the taxes ; the remainder belonged to him. According to the law of King Dushian, the serf is also bound to till for two days in each week the land managed direct by the feudal lord ; to work one day in every year in the vineyard and one day in the meadow of the feudal lord (1). Indeed, in addition to the lands given to the serfs to till, the feudal holder was in the habit of retaining part of his own land in direct management ; probably however the extent of this land was very limited.

§ 2. Land property during Turkish domination.

The Turkish domination, which lasted about four centuries, made great alterations in the relations described in the previous paragraph. The Turkish conception of land property has its original basis in the Koran ; according to the sacred text, the whole of the land is the property of the Sultan, his subjects only having the right of use. Only by way of exception can Turks have property in land, in Arabia. On the basis of this principle all the owners

(1) In addition to these serfs, called " meropsi ", there existed another class of men who were not free, called " otrofsi ", The latter were almost slaves and the services and labours required from them were much heavier.

of land in the old Serbian State were dispossessed ; the land was declared the property of the Sovereign, who, after keeping a part for his own use, gave the remainder in usufruct to his officials, employees and military chiefs. Only in those cases where the original Serbian holders submitted to acceptance of the Mahomedan religion was it permitted to them to retain the use of the lands which lately belonged to them.

According to the same standard of judgement, the land which had belonged until then to the churches and convents was assigned to the mosques. Small properties, completely abolished, were incorporated in those of their neighbours. The Turks therefore having taken the place of the Serbs, the property of the latter became usufruct at best, and they themselves, from owners, became in most cases cultivators. Therefore their condition was an exceedingly painful one, so much so that the cultivator frequently ended by abandoning the land, taking refuge abroad or hiding in the forests and on the mountains.

Time, however, brought other changes. The wars sustained by Turkey had been and were numerous, and its want of money was extreme. The necessity for procuring ampler resources had become evident, and the produce of the land being at that time the major source of revenue, the attention of the rulers was, logically, devoted first of all to the land.

The first step taken was to see that a larger area of land should be brought under cultivation, and laws were promulgated regulating the relations between the rulers ad the inhabitants cultivating the fields. Then the services to be rendered and supplies to be given by the cultivators were defined in principle, and it was provided that except in special cases they could not be expelled from the lands which they tilled.

The obligatory services and deliveries set out in the memorial of the bishop Matthew Nenadovitch consisted principally in the following : handing over one-tenth of the crop ; one *grose* (0.40 centimes) for each member of the family ; one thousand two hundred and eighty grams of honey for each hive; six *para* (0.12 centimes) for each head of cattle ; obligatory furthermore was the payment of the State taxes, that is: again one-tenth of the crop ; twenty-eight *grose* for exemption from military service ; twenty *grose* poll tax ; three *grose* per head of cattle ; three *grose* per "dunum" of vine ; three *grose* per hive; one hundred *grose* for each mill.

With the weakening of Turkish governmental authority there gradually took place a notable change in the legal character of property in land, and it ended in the recognition as proprietor of him who until then had only been deemed to have the usufruct of the land.

After the war against the Turks in 1804 - 1830, two laws (of 1839-1844) allocated property in the land to the farmers who were cultivating it. The same took place in 1878 when Serbia occupied 5 new districts, dispossessing the Turks. This time however the expropriated possessors were indemnified. In the territory occupied after the Balkan wars of 1912-1913, Serbia did not introduce any alteration in the system of land property. Indeed, in

order to prevent any artificial and dangerous speculation, the Government prohibited the transfer of landed property.

§ 3. Legislation in the matter of property in land.

Among the most important laws on land property, we must mention that on Homesteads and that in reference to the passing of property by decease. The former, issued in 1836, prohibited the creditor from expropriating the house of the town debtor, or the house, orchard, vegetable or fruit garden, and the oxen of the farmer debtor.

Many and various were the amendments made (1865, 1873, 1899) in the law in question. By these amendments there were specified : the area of land which could not be expropriated, the quantity of cattle, of agricultural implements and equipment likewise precluded from expropriation, and it was laid down that this minimum indispensable to existence could not even be alienated by the owner.

All this was for the purpose of preventing the formation of a class of landless peasants, and guarding, on the other hand, against the excessive splitting up of landed property.

It must be acknowledged that the former object has been completely achieved ; the census of 1905 has shown that in Serbia there are not more than 1,275 farmers without property. The second object, however, was only secured in part, because there is no provision capable of preventing the land being subdivided among the various heirs on the death of the owner.

The law indeed lays down the equality of rights of inheritance for all male descendants ; thus the entire assets of the estate are distributed in equal parts. This principle has of course led to an excessive division of land.

§ 4. Land property and the natural, social and economic conditions.

The natural conditions of climate and soil are admirably adapted for cattle-breeding, fruit-growing, vine-growing and industrial cultivations (tobacco, flax, hemp and poppy); they are less favourable to the cultivation of cereals.

It is essential to mention here that in Serbia hired agricultural labour does not exist save in exceptional cases, and for some special work requiring to be carried out in the briefest possible time, such as, for instance, haymaking, harvesting, and the maize crop. Probably the absence of this hired labour contributes to preventing the formation of big landed estates.

With regard to small property we may here recall another cause of its excessive splitting-up : with the break-up of the family community which occurred in the second half of the last century, the land property was

divided among all the members, who, as already stated, were fairly numerous. They abstained (either through attachment to the soil, or owing to the absence of industries presenting remunerative employment) from alienating it, and preferred to devote themselves to the cultivation of their several plots.

In the territories occupied after the Balkan wars, there is a special factor influencing landed property. We refer to the want of safety as regards property and even human life.

The landowner is frequently unable to live in the country, and must even quit the village and take up his residence in the nearest city. Therefore, being unable to cultivate and manage his land properly, he endeavours to let it and even sell it. If he finds no better buyer he sells it to his peasants.

§ 5. Present state of land property.

The present state of land property is only the result of the sum of the action of the various factors and causes referred to above.

The land property of the State covers 2,775,053 hectares (excluding the new territories), i. e. 57 % of the entire territory, and consists mainly of forest lands (642,502 hectares), waste lands and public lands. Furthermore, the State is the owner of model farms of an area of 2,100 hectares.

The land property of the communes likewise consists of wood and pasturage.

The land property of districts is relatively small ; each of them maintains a model farm ; there are up to now 58 of them with an area of about 700 hectares.

The land property of churches and convents amounts to about 70,000 hectares, of which 51,573 hectares are forest.

It is as well to bear in mind also that in the territories annexed after the Balkan war the feudal land system has not yet been entirely abolished.

According to the census of 1905, the number of properties is 436,987, of which 332,668 are agricultural.

The following table shows the distribution of land property according to the census of 1897 :

84,720	properties	below 3 hectares	(31.01 %)
137,710	"	from 3 to 10 ha.	(50.42 %)
39,766	"	10 to 20 ha.	(14.52 %)
11,061	"	above 20 ha.	4.05 %)

It will be observed that from 1897 to this day the number of small landowners has increased and that of medium holdings has fallen off. We

may again recall the fact that the general system of cultivation is that of direct management, both hired labour and the renting of lands being very rare, the latter occurring almost exclusively in the neighbourhood of cities for the cultivation of vegetables.

In the territory annexed after the Balkan war, as was stated above, the feudal land system is still in force, but with some modifications ; furthermore large estates still in the hands of the Turks predominate. There are only three large estates belonging to foreigners, and these were only purchased a few years ago.

We may briefy refer now to the most usual labour contract between the Aga (owner) and the cultivatior (Chipchiya).

This kind of contract is for the most part unwritten and its nature is fixed by the usage prevalent for many years : the Aga grants to the Chipchiya the farms (usually about 6-10 hectares), residence and stable, a few head of cattle, and seed.

The Chipchiya is also entitled to graze his own cattle on the property cultivated direct by the Aga (Beglic), and to grind his own grain on the mill of the Aga.

The Chipchiya, in turn, is bound to give $^1/_4$ or $^1/_5$ of the gross crop to the Aga, in addition to an equivalent of the seeds supplied. He is also bound to convey the Aga's share to the latter's granary (or other storage places provided they are not farther than the granary). He is also bound finally to put in two days of work per week on the Beglic lands.

Side by side with this class of contract there are three other kinds of contracts differing from the one last mentioned owing to their brief duration (3-5 years), and because the cultivators are usually small landowners for whom cultivation of the Aga's fields represents a supplementary source of income.

Farming against half-produce rent: The Aga grants the cultivator the land, seeds, and draught cattle. The crop is divided into two equal parts, after deducting $^1/_{10}$ for Government tax and seeds.

Produce-sharing settlements: The peasant begins to cultivate the land after it has been ploughed and sown. The Aga allows him residence and maintenance for himself and family during the period of cultivation, and a small piece of land for vegetable growing.

Out of the gross crop, after deducting $^1/_{10}$ for taxes, three-fourths belong to the Aga and one fourth to the cultivator.

Chessim : This is a true hiring contract, in which the rent is paid not in money but in kind.

On the Beglic also, which as pointed out is the land cultivated direct by the Aga, the Chipchiya must work a certain number of days.

We must also recall that latterly, owing to the action of the Comitadjis, personal security has been greatly lessened and the Aga has adopted the habit of living in the cities, and letting his property to tenants who in turn entrusted it to the Chipchiya.

The small properties, which exist particularly in hilly regions, result from the purchase by the Chipchiya of the land belonging to the Aga.

This is explained on the one hand by the fact that the Aga often desires to get rid of a part of his land owing to the want of safety in those parts; on the other hand it is explained by the circumstance that from each Chipchiya family, one member emigrates abroad in search of work. After 3 or 4 years he returns with sufficient savings to buy a small rural property which is usually the same as he formerly worked on.

Small farms are always worked direct by the owner himself and his family.

MISCELLANEOUS INFORMATION RELATING TO AGRICULTURAL ECONOMY IN GENERAL IN VARIOUS COUNTRIES.

CHINA.

THE FOREST SYSTEM IN CHINA. — *Journal du Ministère de l'Agriculture et du Commerce* Vol. I, N° 6 ; Journal Officiel, N° 1130.

A special law containing 32 articles and supplemented by regulations was recently promulgated in China. It deals with forest administration, the protection of woodlands and afforestation.

The law first of all lays down the system of management of the State forests. The latter are administered either direct by the Ministry of Agriculture and Commerce, or indirectly by local authorities. In the former category are : (1) the forests connected with the sources of rivers and streams ; (2) those extending over the territory of more than two provinces ; (3) those which may form the subject of international negotiations.

There may be classified as "forests of public utility" the forests belonging to the State, to public institutions or private persons, recognised by the Ministry of Agriculture, or the local administrative authority, as answering one of the following purposes : (*a*) the prevention of floods ; (*b*) the protection of the sources of rivers and streams; (*c*) matters of public hygiene ; (*d*) the regulation of the course of streams, with consequent interest to navigation ; (*e*) fishing interest ; (*f*) protection against injury by wind. The owners of woodlands or forests coming under any of these categories may be expropriated against payment of adequate indemnity, and the forests thus expropriated will be administred by the local authority, which will regulate the right of pruning and wood-cutting and will take the necessary measures of precautions to prevent fires.

Private persons or public bodies desirous of obtaining uncultivated mountain lands of the State domain for replanting with forest trees, may have these lands granted them free provided they are of Chinese nationality. The area of lands granted may not in each case exceed 100 square lî (1 lî = 6.1440 sq. metres). After planting the land granted to them, the grantees may apply for an extension or the area at their disposal for afforestation.

To ensure the execution of the re-afforestation work, the grantees of uncultivated mountain land belonging to the State must pay in a caution

money of from twenty to a hundred *yuan* (1) per ten square lî, the exact amount being fixed by the Ministry of Agriculture or the higher local authorities. The caution money paid in may be returned to the grantees if, within 5 years from the date of grant, the competent local authorities are satisfied of the good result of re-afforestation. The interest ranges from 3 to 5 %, and is paid on redemption of the caution money. On the other hand, if, at the end of the one year, no plantation of forest trees has been begun, the grant will be withdrawn, and the grantee will forfeit his caution money, save in case of extension of time by the authorities owing to weather or land phenomena, or any other circumstance forming a case of force majeure.

The lands granted in this way may be entirely exempted from taxation for a period from 5 to 40 years from the date when the concession is granted. The duration of this period will be fixed hy the Ministry of Agriculture or the local authority. In addition, encouragement will be given to grantees obtaining the best results in re-afforestation.

In the public interest the local authorities may prohibit or restrict the working of forests belonging to public establishments or private persons. Unlawful felling, or neglect of upkeep of forests and wood-lands by these two classes of owners may justify measures of coercion by the authorities, who may also compel the owners of uncultivated mining lands to re-afforest them.

The law finally contains a series of penal provisions for forest offences.

UNITED STATES.

VALUE OF FARM LANDS IN THE UNITED STATES. — *The Economic World*, New York, April 15, 1916.

Estimates based upon reports from crop reporters of the Bureau of Crop Estimates of the United States Department of Agriculture place the average value of farm lands in the United States at $ 45,55 per acre, as compared with $ 40,85 a year ago, $ 40,31 two years ago, $ 38,10 three years ago, and $ 36,23 four years ago. The Census reported the value of farm lands in 1910 as $ 32,40 and in 1900 as $ 15,57 per acre. In recent years the value of farm lands has been increasing at the rate of about 5 per cent a year, or approximately $ 2 per acre per year. The exceptional increase of the past year may be explained partly by the reaction in the Southern Cotton States following a temporary depression last year, and partly by the stimulus given by the war to prices, particularly of grain.

Increases have been general throughout the United States, the only

(1) The *yuan* is a piece of fine silver weighing 26.86 grams, the value of which is from 2 to 3 francs according to the rate of exchange.

noteworthy exceptions being orchard lands and some irrigated lands in the Northwest, which apparently had been over-valued before.

The percentage increases in value of farm lands in the past year by sections of the United States are : North Atlantic States, 10 per cent ; Eastern part of North Central States, 9 per cent ; Western part of North Central States, 12 per cent ; South Atlantic States, 19 per cent ; South Central States, 11 per cent ; Far Western States, 11 per cent ; entire United States, 11,5 per cent.

The percentage increases in farm land values in four years, that is since 1912, are : North Atlantic States, 17 per cent ; Eastern part of North Central States, 20 per cent ; Western part of North Central States, 28 per cent ; South Atlantic States, 23 per cent ; South Central States, 25 per cent ; Far Western States, 34 per cent ; entire United States, 25,7 per cent.

***

LABOUR REGULATION IN THE CANNED FRUIT INDUSTRY IN CALIFORNIA. — *California Fruit News*, vol. 53, N° 1443, March 4, 1916.

The Industrial Welfare Commission has just regulated the question of labour in the important industry of canned fruits in California, taking into account the conclusions arrived at in the report of the Wages Commission, on which masters and workmen were represented. These provisions came into force on the 14th April last. They relate in particular to the working hours, wages, piece work or by the day, and the sanitary conditions under which the work is to be carried out. The following are the principal points.

Any person, firm or company employing women or minors on piece work in connection with the canned fruit and vegetable industry, shall pay them at least the following remuneration for cleaning, per 100 lbs., apricots $0.225 ; pears $0.375 ; cling peaches $0.225 ; ordinary peaches $0.125. Per 40 lbs.; $0.09, 0.15, 0.19, 0.05 respectively ; tomatoes $0.03 per 12 quarters. For canning, the price per dozen cans ranges from $0.015 to $0.036 for fruit, and $0.01 and 0.024 for tomatoes. For women and minors paid by the hour the minimum remuneration is as follows : skilled $0.16, and unskilled $0.13. Skill is acquired under the regulations by 3 weeks' work in a fruit-canning establishment.

The maximum working hours for an adult woman, that is over 18 years old, are 10 hours per day or 60 hours per week ; in case of its being necessary to work overtime, the weekly working hours may not exceed 72. Overtime will be paid time and a quarter. The working hours for minors may not exceed 8 hours per day or 48 hours per week.

To ensure the strict observance of those regulations, employers must keep registers recording the time put in by their workmen, and hold them at the disposal of the Industrial Welfare Commission.

Finally, the regulations lay down the minimum of sanitary conveni-

ences and facilities which must be provided for women employed in fruit-canning work.

FRANCE.

RECONSTRUCTION OF THE DESTROYED FARMS AND VILLAGES. — Comptes-Rendus des Séances de l'Académie d'Agriculture, (Proceedings of the Academy of Agriculture), Sitting of the 28th June 1916.

The Academy of Agriculture has granted its patronage to the « General Association of Municipal Health and Technical Officers » ot whose initiative was due the exhibition of the " Restored City " organised on the terrace of the Tuileries and in the tennis hall.

The task set before itself by the above Association in organising the above exhibition was straightway found so attractive and timely that it secured the co-operation of the great architectural and fine arts societies as the society of civil engineers, the Social Museum, and the great hygienic societies.

The object aimed at is before all else the creation of public opinion by bringing home to all the benefits to be obtained from a preliminary study of rational plans for the arrangement of towns and villages, owing to which the work of construction will be better and more rapid and on a surer basis, and will provide the people concerned with more health, more comfort and greater facility of travel, while showing every consideration for natural beauties, places of historic interest and styles characteristic of any region.

To secure this, the organisers intend to resort to all means of propaganda, such as lectures, meetings of specialists and regional congresses.

What they contemplate chiefly is an exhibition of ideas, which however shall also comprise the best types of temporary constructions needed during the period of preparation and completion, together with systems of rapid building construction by which the final installation may be expedited, specimens of economic building material, designs for decoration, ventilation, lighting and sanitation devices.

Regional congresses will be held to which the representatives of the invaded parts will be invited, for each region, the Nord, Champagne and the regions of the Meuse. They will be held separately because they represent somewhat different ideas and characteristic styles which it is desirable to maintain in order to preserve the old traditions of each of our provinces.

Notwithstanding the title of the exihibition, it is the villages which are chiefly to be reconstructed. As against five or six towns seriously damaged, the villages completely destroyed number hundreds. It is upon this that all efforts must be brought to bear. The organisers of the exhibition indeed have concerned themselves with the village in particular. With the aid

of various subsidies they have organised a very important exhibition. The minister of agriculture, M. Méline, and the minister of public instruction and fine arts have made large grants thanks to which substantial premiums were offered to the architects competing with plans of villages on the lines of the programme supplied to them, which contemplates the reconstruction of a village in the region of the North, in that of the East and in Champagne. They have based their studies on the measures taken by them in a number of villages to be rebuilt taken as typical, and industrial an medium cultivation village in the North, an extensive cultivation village in the Aisne, and a village of the Meuse.

Nor is this all ; a competition has been organised for component parts of villages, farms, farm buildings etc. Money premiums will also be awarded to the most meritorious competitors.

The only object aimed at by the organisers of the exhibition is the public interest and progress.

ITALY.

1. TOWARDS THE ESTABLISHMENT OF LABOUR EXCHANGES. *Bollettino dell'Ufficio del lavoro.* Rome, Nos 1-2, Jan.-Feb., 1916.

The Italian section of the International Association for the prevention of unemployment, having regard to the desirability, under present circumstances, of co-ordinating the action taken in relation to the problem of unemployment and especially of promoting for that purpose in the most important of the communes still without such agencies, the establishment of labour exchanges or unemployment bureaux, has prepared in advance two drafts of standard bye-laws and rules for such exchanges and rules for the practical organisation of this service. In view of the importance of the matter we think it expedient to reproduce the principal clauses of these regulations :

a) Draft standard bye-laws for a labour exchange :

Art. 1. — There is established in... a public (municipal, district, divisional, or provincial) labour exchange.

(If the exchange is created on the initiative of local public bodies together with class (employers' and workmen's) unions, or on the initiative of these latter unions only, that is to say where a mixed exchange is in question, the bodies originating the exchange, and their mode of participation and financial contribution should be stated).

Art. 2. — The exchange provides its services free of charge.

(It is recommended that, for reasons which are well known, no charge should be made when public bodies are the founders ; the amount of the charge should be stated for the services of the exchange when founded by other bodies which cannot cover the working expenses in any other way).

It receives offers of and applications for employment in relation to personal labour or work in whatsoever form, both of workmen, and also clerical workers and the like, of both sexes, with a view to intermediating between hirers and employers of labour and workers, supplying the former with the labour and the latter with the employment of which they may stand in need.

In the accomplishment of this task, the exchange must be guided by the most complete impartiality and independence, conforming to the conditions of the tariffs agreed between the two classes, master and workmen, as filed with the exchange or to the conditions of the market.

Art. 3. — The exchange shall collect and furnish to the two parties all information with regard to the conditions of work and the ability and capacity of the applicants, without however assuming any responsibility.

Art. 4. — As soon as the exchange is advised of any strike or lock-out, it must suspend its operations in relation to the firms and men in question.

Art. 5. — The exchange will act in concert with the other existing or subsequently established exchanges, mutually interchanging offers and applications for work when occasion arises.

The exchange shall also keep in touch with other like exchanges in other cities and abroad for the purpose of collecting useful information in reference to supply, demand and conditions of labour

Art. 6. — The labour exchange shall be administered and directed by a committee consisting of... members, chosen in equal numbers from the masters' and workmen's organisations.

b) Draft Internal Regulations for Labour Exchange.

Art. 1. — Applications for employment must be made by the workmen personally at the labour exchange.

Offers of work may also be made by post or telephone. To those employers of labour who request it there may be distributed free of charge special forms having on the obverse the address of the exchange and on the reverse the particulars to be supplied by the employer in need of workmen.

Art. 2. — Applications for employment must be :

a) Entered by the exchange in chronological order, there being set down in a corresponding register the date of presentation (month and day); and the name, surname and trade of the workman.

The order of entry in the register, other conditions equal, gives the right of precedence in employment.

b) Transcribed on special individual forms of different colours, according as males or females are in question. The form shall be given the number assigned to the application for work in the register.

In the upper part of such form the following data shall be entered : 1) date ; 2) name and surname ; 3) place of birth ; 4) address ; 5) age ; 6) whether can read and write ; 7) trade (indicate speciality) ; 8) name and address of the last firm with whom employed and duration of the employment ; 9) how long out of work ; 10) testimonial of service.

In the lower part of such form a note shall be made of the firms to which the workman has been sent and the date of sending.

Art. 3. — Offers of employment must be :

a) Entered by the exchange in chronological order, there being set out in a corresponding register the date (month and day), the applicant firm, the industry and location of the firm, the trade and number of workmen required ; the minimum wage offered, the hours of labour, and the locality in which they will be taken on.

The order of entry in the register, other conditions being equal, gives the right to precedence in employment.

b) Transcribed on special individual forms. Each of these forms, differing in colour from the others referred to in art. 2 *b*) shall, in the upper part, contain : 1) the registered number referred to under *a*) ; 2) the date (month and day of application) ; 3) the applying firm ; 4) the address of the firm ; 5) the number of workmen required and their trade ; 6) the minimum wage offered ; 7) the hours of work ; 8) special observations.

In the lower part a suitable place shall be reserved for noting the workmen sent to the firm.

* * *

2. THE AGRICULTURAL POPULATION OF ITALY. — *Census of the population of Italy at the 10th June* 1911. Vol. V. Present population over ten years of age, classified according to sex, age and profession or studies. Ministry of Agriculture, Industry and Commerce. General Direction of Statistics and Labour. Census Office, Rome, 1915.

From the last volume (No. V) of the census returns of the population of the Kingdom of Italy, recently published, it appears that of a population over 10 years of age of 26,580,048, at the 10th June 1911, 9,085,597 were engaged in agriculture, hunting and fishing and 1,261,919 in agrarian industries : 45 % therefore of the population is connected with agriculture. To be more specific, on the above date there were the following persons of both sexes above the age of 10 :

Farmers who manage or till their own or family land	1,715,260
Leaseholders, etc.	29,466
Tenant farmers	694,118
Share farmers	1,581,492
Peasants under contract	384,593
Day labourers	4,215,648
Market gardeners, growers of citrus, tobacco, fruits and the vine	66,428
Gardeners	24,529
Foresters	11,928
Gatherers of mushrooms, truffles etc., herbpickers	746
Wood cutters, charcoal burners	22,576

Shepherds, ploughmen, ox-herds	237,005
Breeders of cattle, horses, sheep, pigs etc.	1,266
Breeders of poultry	722
Bee keepers	396
Silkworm-egg breeders	1,554
Game keepers and hunters	1,358
Stewards and agents	27,071
Rural guards and private forest keepers	9,920
Fishermen, ditchers	59,154
Fishpond keepers	367

Scanning other trades we find that the following also relate to branches of agriculture :

Barrels and casks	20,137
Cork	2,913
Warehousing of grain	300
Seasoning of forage	245
Seasoning fruits and grain	5,449
Oil pressers	1,678
Wine makers	6,663
Work in connection with milk	26,469
Storage and keeping of poultry and eggs	374
Honey and wax	2,417
Chemical fertilisers	2,383
Sale of cattle	10,956
Sale of grain, seeds, etc.	17,287
Sale of wine and oil	21,944
Sale of eggs, poultry, milk, butter, etc.	159,382

RUGGERI ALFREDO, gerente responsabile.

INTERNATIONAL INSTITUTE OF AGRICULTURE
BUREAU OF ECONOMIC AND SOCIAL INTELLIGENCE

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1916

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THE WORK OF THE JEWISH AGRICULTURAL AND INDUSTRIAL AID SOCIETY.

SOURCES:

ANNUAL REPORTS OF THE JEWISH AGRICULTURAL AND INDUSTRIAL AID SOCIETY FROM 1900 TO 1915, inclusive. Press of Clarence S. Nathan, Franklin Street, New York.

ROBINSON (Leonard G.): THE AGRICULTURAL ACTIVITIES OF THE JEWS IN AMERICA. American Jewish Committee, New York, 1912.

In our issue for July 1915 we reviewed the work of this society, as set forth in its annual report for 1914. We now propose to give a brief account of its origins, purposes and achievements up to the date of the publication of its latest report on December 31st, 1915.

§ 1. ORIGIN OF THE MOVEMENT.

Prior to 1882 Jewish immigration to the United States was a negligible quantity, but from that date forward Jewish immigrants, mainly from Russia, Roumania, and Galicia, began to arrive in large and ever increasing numbers. The situation created by this large influx called forth the best efforts of their co-religionists, and the responsibility of receiving these immigrants, caring for them and helping them to adjust themselves to their new surroundings was cheerfully met by their American brethren.

As many of these immigrants came from agricultural districts the idea of diverting them from the overcrowded city slums to the country seemed to present itself as the best solution of what was then considered a most serious problem. Colonies sprang up in various parts of the country, but owing to inadequate preparation they all failed with the exception of three which still survive in South Jersey, and the "back to the land" movement for the Jew seemed threatened with extinction.

In 1891, however, a new force appeared on the scene. Baron Maurice de Hirsch established a special fund, the income of which was to be devoted to the amelioration of the conditions of the Jewish immigrants, and as a result the agricultural movement gained a fresh lease of life.

While the encouragement of agriculture was one of the purposes of the Hirsch fund, it embraced many other fields of activity, and in order to bring the agricultural work to a higher state of efficiency it was soon deemed advisable to entrust this important task to a distinct organization. The result was that with the assistance of the Baron de Hirsch Fund and of the Jewish Colonization Association, the Jewish Agricultural and Industrial Aid Society was incorporated in 1900, and all agricultural matters were immediately turned over to it. Its objects as set forth in its articles of incorporation, were:

(1) The encouragement and direction of agriculture among Jews, residents in the United States, principally immigrants from Russia, Roumania and Galicia; the removal of such persons dwelling in the crowded sections of cities to agricultural and industrial districts, and provision for their temporary support.

(2) The grant of loans to mechanics, artisans, and tradesmen to enable them to secure larger earnings and accumulate savings for the acquisition of homes in suburban, agricultural, and industrial districts.

(3) The removal of industries now pursued in tenements or shops in crowded sections of the cities, by aiding manufacturers and contractors to transfer their shops and business to agricultural and industrial districts where their employees may continue to labour and acquire individual homes.

(4) The encouragement of co-operative creameries and factories and of storage houses for canning and preserving fruits and vegetables and making wine.

(5) Co-operation with individuals, building associations, savings institutions, and other corporations in carrying out the foregoing objects.

It will thus be seen that the programme of the society at its inception was a mixed one, but gradually the work along non-agricultural lines has been curtailed, and taken over by other organizations, and it is essentially on agricultural lines that development has taken place, development which now places this society in the front rank of national philanthropic organizations in America.

§ 2. Growth of the Jewish Agricultural Movement.

It was in New York, New Jersey, and the New England States that the Jewish farmers mostly settled, and these localities are still the centres of the movement, scores of the "abandoned farms" of the Eastern States having been reclaimed by the efforts of these settlers. Colonies of Jewish farmers are however to be found scattered throughout the country, a whole body of pioneer workers, for instance, having settled on government homesteads in North Dakota.

To state with any degree of accuracy the number of Jewish farmers in the United States is not possible. The report of the society for 1912 gives the number of Jewish farming families with whom the society had come in touch as 3,718, representing 18,590 persons, occupying 437,265 acres valued with their equipment at $26,360,664. According to the opinion of the United States Immigration Commission this would represent about 75 per cent of the Jewish agricultural population, while the secretary of the J. A. and I. A. S. estimated it at only about 50 per cent of the total. Besides these, hundreds of Jewish labourers are now acquiring experience on farms in many parts of the country, preparatory to settling down on their own account. Jewish young men are entering the agricultural colleges in ever increasing numbers. A Jewish agricultural paper, published in Yiddish by the society, has been in existence since 1908 and is supported by some 4000 subscribers. The number of loans made to the farmers by the society has increased steadily year by year, and everything points to the fact that the movement is passing out of the experimental stage, and that the Jewish farmer in America is not only a fact, but is gradually becoming a factor.

§ 3. The Activities of the Society.

Loans to Farmers. — Although the Society has developed a variety of activities, the basic as well as the most important branch of its work is the extension of financial assistance in the form of loans to farmers and to those desirous of becoming farmers. These loans bear a low rate of interest, generally 4 per cent, and are repayable in moderate annual instalments. Funds being limited, the aim is to grant loans only in cases where they cannot otherwise be obtained. Therefore, as a rule, first mortgage loans are not granted, for they can be had from other sources. The security given the society is generally a second mortgage, frequently supplemented by a chattle mortgage or other collateral.

With loans decidedly marginal and security which is, to say the least, sub-standard, it might be expected that losses would be heavy. As a matter

of fact they have been only trifling. In the sixteen years of its existence the society has lent $1,883,183, and the total loss during the same period has amounted to $53,023 or only 2.82 per cent.

If we take the latest figures available we find that, in 1915, 396 loans were granted for the following purposes :

Purpose	Number	Per cent.
The purchase of farm	30	8
The purchase of equipment	130	33
The construction or repair of buildings	54	14
The paying off of mortgages or other debts	168	42
Working capital	14	3
Total	396	100

The following tables show the status of farm loans made by the Society since its organisation up to the end of 1915.

Status of Farm Loans made by the Society since its Organization.

Date of Loans	No of Loans closed	Gross amount of Loans closed	Merged with later loans	%	Money returned	%	Paid by sale of farm	%	Paid by fire loss	%
		$	$		$		$		$	
1900	25	9,125.00	1,687.50	18.48	150.00	1.65	839.87	9.20	—	—
1901	65	29,014.80	1,222.00	4.21	—	—	1,475.00	5.08	145.00	0.50
1902	65	33,678.56	6,230.91	18.50	500.00	1.48	5,184.35	15.40	440.00	1.31
1903	106	44,773.02	7,714.38	17.23	305.00	0.68	6,915.48	15.44	1,136.08	2.54
1904	125	53,171.44	7,532,97	14.16	1,150.00	2.16	9,602.26	18.06	995.00	1.87
1905	134	63,953.30	12,299.88	19.23	1,807.85	2.83	10,877.73	17.01	603.31	0.94
1906	151	69,476.21	15,257.34	21.96	1,600.00	2.30	11,312.31	16.28	575.00	0.83
1907	204	135,789.69	28,371.43	20.89	3,381.45	2.49	17,596.13	12.96	709.77	0.52
1908	263	186,444.71	32,547.47	17.46	4,308.60	2.31	15,152.10	8.13	2,997.54	1.61
1909	239	144,946.08	16,368.72	11.29	3,708.84	2.56	17,806.13	12.29	2,609.40	1.80
1910	281	199,407.60	22,729.84	11.40	3,515.60	1.77	27,672.31	13.88	1,048.68	0.52
1911	320	259,046.23	21,841.46	8.43	9,811.82	3.79	23,664.85	9,14	3,757.47	1.45
1912	356	250,774.67	7,137.10	2.84	8,483.05	3.38	20,052.19	8.00	1,602.50	0.64
1913	358	226,034.07	3,945.31	1.75	11,200.25	4.96	16,629.94	7.36	1,592.64	0.70
1914	331	200,312.96	300.00	0.15	5,208.26	2.60	11,075.22	5.53	1,811.78	0.90
1915	358	162,408.71	—	—	4,306.40	2.65	2,250.00	1.39	—	—
Total .	3,381	2,068,369.75	185,186.31	8.95	59,437.12	2.87	198,106.07	9.58	20.024.17	0.97

Status of Farm Loans made by the Society since its organization.

Date of Loans	Foreclosed and transferred to property	%	Charged to profit and loss	%	Regular payments on principal	%	Present balance of Loans	%	Payments of interest	Amount of interest delinquent	Per cent on present balance of Loans
	$		$		$		$		$	$	
1900. . . .	457.56	5.01	302.57	3.32	5,064.51	55.51	622.99	6.83	2,554.05	—	—
1901. . . .	2,595.89	8.95	2,419.07	8.34	19,781.89	68.18	1,375.95	4.74	5,526.39	37.76	2.74
1902. . . .	4,323.56	12.84	914.45	2.71	14,821.54	44.01	1,263.75	3.75	6,669.83	8.53	0.67
1903. . . .	1,623.00	3.63	6,602.90	14.75	17,576.45	39.26	2,899.73	6.47	6,522.17	112.00	3.86
1904. . . .	3,021.12	5.69	1,357.18	2.55	28,081.73	52.82	1,431.18	2.69	9,926.87	2.52	0.18
1905. . . .	9,275.30	14.50	1,333.76	2.09	24,342.09	38.06	3,413.38	5.34	8,163.89	437.22	12.81
1906. . . .	2,841.93	4.09	2,430.15	3.50	26,371.27	37.96	9,088.91	13.08	10,420.21	146.99	1.62
1907. . . .	18,321.04	13.50	18,120.37	13.34	24,672.58	18.17	24,616.92	18.13	16,442.36	1,923.43	7.81
1908. . . .	41,997.56	22.53	2,119.84	1.13	37,068.25	19.88	50,253.35	26.95	21,640.91	6,437.49	12.81
1909. . . .	14,802.26	10.21	4,250.19	2.93	45,254.37	31.22	40,146.17	27.70	19,604.38	2,170,20	5.41
1910. . . .	19,043.50	9.55	2,292.07	1.15	39,641.60	19.88	83,463.80	41.85	24,940.44	5,094.35	6.10
1911. . . .	33,246.55	12.83	4,304.03	1.67	36,204.02	13.97	126,216.03	48.72	25,507.01	8,339.77	6.61
1912. . . .	15,289.39	6.10	5,220.35	2.08	39,629.22	15.80	153,360.87	61.16	21,912.88	5,732.54	3.74
1913. . . .	—	—	235.41	0.10	27,447.03	12.14	164,983.49	72.99	15,072.59	3,328.04	2.02
1914. . . .	300.00	0.15	1,120.82	0.56	16,070.88	8.02	164,438.00	82.09	8,751,17	2,985.00	1.81
1915. . . .	—	—	—	—	2,596.77	1.60	153,255.54	94.36	1,347.58	221.71	0.14
Total .	167,138.66	8.08	53,023.16	2.57	404,624.20	19.56	980,830.06	47.42	205,002.73	36,977.55	3.77

The report for 1915 calls attention to the fact that the easing up of the money market after the abnormal conditions which the outbreak of war produced in 1914, enabled many of the farmers with whom the society is in touch to raise larger mortgages on their farms with which to refund all their obligations, including the repayment of loans from the society, many of which were liquidated before maturity. It is pointed out, however, that these conditions are not without grave possibilities. The first mortgages raised are largely demand or short term mortgages. Should a financial stringency recur, many will be called in, and many a solvent farmer whose security is gilt-edged, and who meets his obligations promptly, will be forced to the wall. It is this fast and loose financial game to which the farm industry is subjected in America which makes the reorganization of rural credits in the United States so imperative.

Advice to prospective farmers. — The purpose of the J. A. & I. A. S. is to assist Jewish farmers and those desirous of becoming farmers not only with loans but also with advice and information. The society carries on no "back to the land" propaganda. On the contrary, it finds that its greatest task is to prevent those who are unfit from embarking on a venture for which they are ill-prepared and in which their chances of success are extremely remote. Therefore when an applicant who is not a farmer applies to the society, personally or by correspondence, for a loan in order to take a farm a great deal of trouble is taken by personal interviews and enquiries to ascertain his fitness for the new life he wishes to start.

Is the would-be farmer physically, mentally, and temperamentally qualified for farm life? Has he had any farming experience? Comparatively few of the applicants have that valuable asset. He must acquire his experience somehow. If he gets it after he buys his farm, he is sure to find it rather costly. Would it not be the part of wisdom for him to get this experience before? The society offers to secure for him a position as farm labourer. If the applicant himself is not fit material for farm labour, but has other requisite conditions for taking up agriculture, he is advised to let one of his grown up sons work on a farm for at least a season or two.

The Farm Labour Bureau. — It was largely in order to secure employment on farms for such applicants that the Farm Labour Bureau was started in 1908. This branch of the society's work has grown from year to year, and in 1915 no fewer than 1,201 Jewish labourers, most of whom had no previous experience, were placed on farms in twenty States, and during its eight years of work such positions have been secured for 5,532 applicants, a large number of whom have subsequently established themselves on their own farms.

A number of letters from the farmers with whom these labourers have been placed are published in the annual reports of the society, showing that in a large majority of cases the arrangement has been to the mutual satisfaction of employer and employed.

Initial Capital. — The experience of the society is that $1,000 is the minimum capital which makes it advisable for a man to venture on the purchase of a farm, and even then he must have the assistance of the J. A. &

I. A. S. Of the 1,159 applicants who adressed the society in 1915, 664 possessed a capital of $1,000 or over, 319 had between $500 and $1,000, 164 had less than $500, and 12 had no capital at all. In 1915, 396 applications were granted of 467 persons engaged in the most varied occupations seventy-two in number, as shown by the following table:

Occupation	No	Occupation	No
Actors	1	Longshoremen	1
Agents	2	Machinists	4
Agricultural experts	1	Managers	1
Authors	1	Manufacturers	7
Bakers	4	Masons	4
Blacksmiths	4	Mechanics	2
Bookbinders	1	Mechanical Dentists	1
Bookkeepers	2	Merchants	7
Brush Makers	1	Metal Workers	3
Butchers	5	Milliners	1
Cabinet Makers	2	Newsdealers	1
Cap Makers	6	Painters	14
Carpenters	17	Pennant Makers	1
Cashiers	1	Peddlers	30
Cattle Dealers	1	Plumbers	3
Chauffeurs	1	Porters	1
Cigar Makers	8	Potters	1
Civil Engineers	1	Pressers	11
Clerks	6	Printers	3
Contractors	2	Rabbis	2
Decorators	2	Real Estate Dealers	2
Dressmakers	3	Salesmen	5
Drivers	7	Shochets	1
Druggists	1	Shoemakers	1
Dyers	4	Storekeepers	63
Electricians	2	Students	9
Farmers	101	Syrup Makers	1
Farm Labourers	1	Tailors	68
Foremen	1	Teachers	2
Furriers	1	Tinsmiths	3
Glaziers	2	Upholsterers	1
Harness Makers	1	Waiters	3
Hatters	1	Watchmen	3
Jewellers	2	Weavers	1
Laundrymen	4	Wood Carvers	1
Leather Workers	1		
Locksmiths	1	Total	467

Farm Finding. — When an applicant fulfills all the requirements of the society, help is afforded him in securing a suitable farm. The society early discovered that to allow a man to buy his farm first and to advise and help him afterwards was "putting the cart before the horse." Accordingly, from the outset agricultural experts were placed at the service of prospective farmers to advise as to the value of farms and their suitability to needs of would-be purchasers. This task is increasingly difficult, as good farms, well situated near markets, at moderate prices are growing more and more scarce. In 1907 the society made the experiment of purchasing desirable farms for the purpose of reselling them to applicants at cost price and on easy terms, and this branch of its work has gradually developed. In 1915 loans amounting to $12,538 were granted as the price of farms owned by the society to be paid for by instalments, instead of the purchasing price being advanced in cash. One of the beneficent effects of this farm finding activity has been its action as a check on unscrupulous real estate dealers and agencies for the sale of farms.

§ 4. Co-operative and educational work.

Education. — Besides its work as an agency for assisting Jewish farmers or would-be farmers with loans and advice, the J. A. & I. A. S, has steadily applied itself to educational work and to developing the co-operative spirit among those whom it assists.

We have already referred to the "Jewish Farmer", the first of the educational activities of the society and the only agricultural paper in Yiddish in the world, which made its appearance in 1908. In the same year a system of itinerant instruction was inaugurated. The most important Jewish farming communities are visited periodically and lectures on timely topics are delivered by the staff of the "Jewish Farmer" and others. Personal visits are also made to farmers who thus conduct under competent supervision individual laboratory or field work on their own farms.

In 1908 the society instituted a system of free scholarships, by aid of which the children of Jewish farmers are enabled to attend the special courses offered by the agricultural colleges of their respective States.

There are two Jewish agricultural schools in the United States, the Baron de Hirsch Agricultural School at Woodbine, New Jersey, founded in 1894, which has the distinction of being the first school in the United States imparting secondary education in agriculture, and the National Farm School, founded by Rabbi Joseph Krauskopf in 1896 at Philadelphia. This latter aims more especially at affording agricultural training to young men who are not prepared to enter State agricultural colleges. The Society works in close collaboration with these two institutions which supply each year a leaven of highly trained Jewish agricultural experts to promote the progress of Jewish farming.

Federation of Jewish Farmers. — This Federation was founded in 1909 by

thirteen local associations; at the end of 1915 it numbered 56 affiliated associations. Its purpose is to promote the economic improvement of the Jewish farmer and his social, educational, and religious betterment. It has established a purchasing bureau which does the usual business transacted by such organizations, buying farm requisites in bulk, the quality of which it guarantees, and which it resells to farmers at lower prices than those which obtain elsewhere. This purchasing bureau passed through a severe crisis in 1915, when it determined to revert to the true principles of co-operative buying from which it had deviated, i. e. to charge the purchaser the retail price, returning any surplus in the form of dividends, and to sell for cash only. The immediate result of this policy was to reduce the business done from $ 48,000 in 1914 to $ 18,000 in 1915, or by 63 per cent., but the report points out that the usefulness of the bureau has not been reduced in the same proportion, as its activities have placed the business done by the farmers with other concerns on a more competitive basis.

Credit Unions. — A field in which the J. A. & I. A. S. rightly and proudly claims to have acted the part of pioneer is that of co-operative personal credit. The report of the society for 1909 contained the following passage:

" One of the difficulties confronting the American farmer is the want of agricultural credit. By this is meant short time credit, similar in degree to the credit of commerce, as distinguished from long time credit or mortgage loans. While the latter form of credit has had an extensive development in this country, agricultural credit as such is virtually non-existent, and the American farmer has been forced to depend for his annual working capital upon the generosity of neighbours, the forebearance of the local storekeeper, or the cupidity of the usurer... Our society, unfortunately, is, for obvious reasons, in no position to grant loans of this nature... It is therefore planned to initiate a system of co-operative local credit associations, somewhat on the lines of the Raiffeisen system, which has done so much good work among the farmers in Germany ".

In 1910 an effort was made in this direction. Great difficulties were encountered, especially the absence of empowering legislation by which such associations could be incorporated, and it was finally decided to proceed by organizing the credit unions as voluntary associations. In the early part of 1911 three credit unions — the first co-operative agricultural credit banks on American soil — were organised simultaneously. In 1912 there were five such credit unions, nine in 1913, and in 1915 a total number of nineteen was reported.

In 1913 a credit union law became effective in New-York when the eight credit unions which had then been organised in the State were incorporated. In Massachusetts also the legal status of the unions is now regulated by a special law enacted in 1909.

The following table published with the report of the society for 1915 shows the status of these credit unions in that year.

Name	Commenced Business	N° of Members	N° of Shares Outstanding	Amount of Loans Outstanding	Interest Collected	Reserve Income	Expenses	Total Assets	Total Liabilities	Assets over Liabilities
Fairfield, Conn.	May, 1911	35	114	$ 1,645.00	$ 387.54	$ 11.00	$ 236.46	$ 1,732.08	$ 1,570.00	$ 162.08
Ellington, Conn.	May, 1911	29	137	1,978.00	452.18	54.14	148.70	2,042.62	1,685.00	357.62
Renssehaer, N. Y.	May, 1911	28	73	1,529.00	382.35	34.15	174.00	1,607.50	1,365.00	242.50
Briggs St. N. Y.	March, 1912	48	125	1,791.50	335.92	—	103.55	1,857.37	1,625.00	232.37
Lebanon, Conn.	March, 1912	22	110	1,725.80	397.04	30.45	139.33	1,824.01	1,550.00	274.01
Colchester, Conn.	April, 1912	26	101	1,742.00	342.61	12.30	110.56	1,749.35	1,505.00	244.35
Fallsburg, N. Y.	April, 1912	45	104	1,480.00	319.67	85.02	202.99	1,721.70	1,520.00	201.70
Hurleyville, N. Y.	May, 1912	30	113	1,610.00	349.19	15.15	96.43	1,832.91	1,565.00	267.91
Hightstown, N. Y.	Jan., 1913	14	49	693.00	133.06	—	75.41	1,302.65	1,245.00	57.65
Parksville, N. Y.	Jan., 1913	20	100	1,460.00	238.60	—	87.09	1,651.51	1,500.00	151.51
Woodbine, N. Y.	Feb., 1913	32	120	1,745.00	252.78	7.60	93.30	1,767.08	1,600.00	167.08
Carmel, N. Y.	Feb., 1913	36	131	1,577,00	258.16	13.61	96.30	1,830.47	1.655.00	175.47
Flemington, N. Y.	March, 1913	24	96	1,487.00	239.74	13.21	137.03	1,596.92	1,481.00	115.92
Perrineville, N. Y.	April. 1913	24	86	1,520.00	194.09	10.00	75.97	1,708.12	1,580.00	128.12
Ellenville, N. Y.	April, 1913	30	101	1,431.00	190.66	4.50	74.55	1,628.61	1,508.00	120.61
Maplewood, N. Y.	April, 1913	37	111	1,465.00	228.36	9.68	78.97	1,714.07	1,555.00	159.07
Ferndale, N. Y.	April, 1913	28	84	1,140.00	183.36	7.50	101.97	1,508.89	1,420.00	88.89
Bristol, Mass.	April, 1914	46	128	1,675.00	119.94	1.00	60.64	1,743.30	1,683.00	60.30
Arnston, Conn.	July, 1915	19	100	987.00	33.60	—	—	1,033.60	1,000.00	33.60
Totals . . .		573	1983	$28,681.30	$3,038.85	$309.31	$2,093.25	$31,852.76	$28,612.00	$3,240.76

Farmers' Land Bank. — Another initiative in the field of cooperative credit taken by the Jewish farmers in New York State has been the organization in 1915, under the recent New York Land Bank Act, of the first Farmers' Savings and Loan Association, the only one among farmers in the State of New York. On October 6th, 1915, this association was examined by the banking department of the State. The following is the financial statement of the association as contained in the examiner's report:

Assets		Liabilities	
Loans on Bonds and Mortgages	$ 8,935.00	Income Shares	$16,000.00
Loans on Notes and Shares	7,002.00	Saving Shares	275.35
Shares of Land Bank State of N. Y.	1,000.00	Borrowed Money	1,500.00
Interest Accrued	73.27	Examiner's Surplus	295.58
Cash in Hand and in Bank	1,060.66		
	$18,070.93		$18,070.93

Since this report was rendered this association has received $ 5,000 from the Land Bank in exchange for $ 8,400 in first mortgages on farms belonging to its members, and three more loans were made by it amounting to $ 6,000.

§ 5. Conclusion.

Summarising the results of this movement, it may be said that the history of the agricultural activities of the Jews in America is one of gradual but steady progress. We will conclude by quoting from the report of the Jewish Agricultural Aid Society for 1911 an account of the experiences of one of the many farmers established on the land by its aid. His progress from poverty to substantial comfort is typical of the experiences of many whom the society aids.

" In 1908 ", writes the able manager of the society, Mr. Leonard G. Robinson, " we lent $ 500 to M. L., a Jewish farmer in Benston, Pierce County, Washington. The story of his farming experience is an interesting one and we give it in his own words:

" I came to this country when a boy in 1879, landed in New York, but soon left for Chicago. I worked in a shoe factory and did all kinds of work, and also spent a great deal of time peddling. I left Chicago and peddled all through the West until I landed in Washington. I took into my head to buy a farm and so I bought this place where I am living now, for $ 1,250. I paid $ 850 cash and 400 was left on mortgage at 7 per cent. I had

one small horse, spring wagon and harness. Things looked pretty blue. There was an old little house, no fences, no barn, not one fruit tree, no money, no friends, no hen. In some way I got hold of $ 10 with which I bought a cow for $ 30, $ 20 to be paid in two months. From another farmer I purchased a dozen hens, also without money. Then I left my family on the farm and I myself went to work on the road. I made money enough to pay for the cow and hens, and soon after I rolled up my sleeves and went to work on the farm. First I cleared a piece of upland and planted an orchard. All of these trees bear fruit to-day. Then I made a place for early garden. The first year I raised about 250 sacks of potatoes ; once I took 10 sacks to Tacoma, 22 miles. After spending two days on the road, I sold them for 50 cents a sack, which just about paid my expenses and expenses for the horse but did not leave me enough money to buy a sack of flour. When I came home I decided to let the potatoes rot in the field, and just took enough for our own use. Those were blue days for me. But in the meantime my flock of hens increased and I made a living from them.

" Later I took the post office which also brought me a few cents. We thus managed to get along. But I still kept working away on the farm making fences and other improvements, doing all the work myself, as I had no money to hire anyone. Mistakes I made enough. For example, I cleared a piece of land and was going to sow peas. An old farmer told me the best way was to plough them under, so I followed his advice and not one of the peas came up. Meantime, the railroad came through and stations were built all along the line. I am on the farm since 1902 and now I am getting along fine. I paid up my mortgage of $ 400, built a new house, just completed a big new house, made a stone and cement cellar, a granary, hen houses, brooder houses, sheds, in fact almost everything that the farmer wants. I have four milch cows, which bring me in about five dollars a week, outside of their feed. I have about 125 laying hens, besides young ones and what they bring me in you can see from the bills I am sending you. They cost me about 75 cents a week to feed. Besides this I have five young heifers, two good horses, two wagons, harness, mowing machine, rake, and all other tools, an incubator, brooder. I raised this year 150 sacks of potatoes, besides what I had for my own use ; also 22 good loads of hay. I am making a good living and I have some money in the bank. I could write a lot more ".

GREAT BRITAIN AND IRELAND.

CO-OPERATION IN AGRICULTURE IN 1914.

SOURCE:

The Board of Trade Labour Gazette, Vol. XXIV, April and June 1916.

The following particulars relating to registered agricultural co-operative societies in the United Kingdom are based upon returns made direct to the department, supplemented by information supplied by the Chief Registrar of Friendly Societies.

§ 1. Distribution and production.

General Summary. — Returns obtained by the department for the year 1914 showed that there were at work at the end of the year in the United Kingdom 975 registered co-operative societies engaged in agricultural distribution and production. Of these societies 895 were engaged wholly in agricultural operations, 512 being engaged in the distribution of seeds, manures, implements, etc., and 383 mainly in the production of butter.

The 895 societies had an aggregate membership of 117,044, an increase of 4,898, or 4.4 per cent., on that of the previous years, and of 51,436, or 78.4 per cent., on that of 1904. The total share, loan and reserve capital amounted to £1,155,393 an increase, of £123,996, or 12.0 per cent., on the amount in 1913, and £754,607 or 188.3 per cent., more than that of 1904.

The aggregate sales by these 895 societies amounted to £6,849,945 during the year, an increase of £779,685, or 12.8 per cent., over those of 1913, and of £5,054,150 or 281.4 per cent., over those of 1904, while the profit was £102,037, an increase of £62,114 over that of 1913.

The number of persons employed by these societies was 3,413; and the amount paid in wages to them £178,805, an increase over 1913 of 118 and £16,132 respectively.

In addition to the 895 societies mentioned above, there were 80 industrial co-operative societies having farming and dairying departments;

in 1914, 789 persons were employed in these departments to whom £43,798 was paid in wages, while the sales amounted to £336,443.

The following table shows for England and Wales, Scotland, and Ireland the sales in 1914 of all the 975 distributive and productive societies and departments :

	Agricultural Distributive Societies	Agricultural Productive Societies and Departments	Total	
			Amount	Percentage
	£	£	£	£
England and Wales	2,078,002	469,832	2,547,834	35.5
Scotland	468,165	308,368	776,533	10.8
Ireland	783,927	3,078,094	3,862,021	53.7
United Kingdom . . .	3,330,094	3,856,294	7,186,388	100.0

The sales by the distributive societies in England and Wales were over 62 per cent of the total, or nearly twice the amount of the combined sales in Scotland and Ireland ; but in the productive societies and departments the sales in Ireland amounted to 79.8 per cent. of the total, or nearly four times those in England and Wales and Scotland.

Distribution. — The table given below shows for the years 1904-14 the sales of agricultural distributive societies in England and Wales, Scotland and Ireland respectively :

Year	England and Wales		Scotland		Ireland	
	No. of Societies	Sales	No. of Societies	Sales	No. of Societies	Sales
		£		£		£
1904	65	146,197	2	44,850	155	372,080
1905	82	214,292	5	46,610	150	371,273
1906	111	387,775	8	51,511	161	420,223
1907	121	572,735	12	80,338	163	484,771
1908	131	751,445	19	99,530	157	469,556
1909	145	885,683	31	227,141	160	491,034
1910	165	1,036,515	43	291,838	168	521,193
1911	217	1,325,547	55	335,470	159	525,580
1912	228	1,623,805	69	367,273	153	641,239
1913	242	1,822,050	73	417,742	150	694,841
1914	278	2,078,002	77	468,165	157	783,927

As compared with 1904 the sales by societies in England and Wales and in Scotland showed large increases, and in Ireland, where agricultural co-operation was already well established in 1904, the sales were more than doubled. Compared with the previous year the sales in 1914 increased by 14.0 per cent. in England, and Wales, by 12.1 per cent in Scotland, and by 12.8 per cent. in Ireland.

Production. — The following table gives the number of societies, with the amount of their sales and transfers, engaged in productive operations during the years 1904-14.

Year.	Special Farming and Dairying Societies		Farming and Dairying Departments of Wholesale and Retail Industrial Distributive Societies		Total Agricultural Production by all Classes of Societies	
	No. of Societies	Sales	No. of Societies	Sales and Transfers (1)	No. of Societies	Sales and Transfers (1)
		£		£		£
1904	256	1,232,668	60	401,383	316	1,634,051
1905	260	1,372,552	56	402,639	316	1,775,191
1906	272	1,683,120	61	473,258	333	2,156,378
1907	287	1,829,279	64	477,379	351	2,306,658
1908	303	1,969,582	69	494,889	372	2,464,471
1909	318	2,044,917	71	467,967	389	2,512,884
1910	336	2,255,047	71	435,568	407	2,690,615
1911	338	2,387,642	72	330,267	410	2,717,909
1912	352	2,925,432	76	301,069	428	3,226,501
1913	368	3,135,627	73	307,015	441	3,442,642
1914	383	3,519,851	80	336,443	463	3,856,294

(1) The goods produced by the productive departments of industrial co-operative societies are usually not sold direct, but are transferred to the distributive departments.

As compared with 1904 the sales of special farming and dairying societies were nearly trebled, but the sales of agricultural departments of industrial societies showed a decline. Compared with 1913 there was an increase of 12.3 per cent. in the sales of special farming and dairying societies, and of 9.6 per cent. in those of the agricultural departments of industrial societies. Of the total production in 1914, 12.2 per cent. was in England and Wales, 8 per cent in Scotland, and 79.8 per cent in Ireland.

Profit sharing. — The returns made to the department show that of the 512 agricultural distributive societies 43, employing 183 persons and paying £16,341 in wages, paid bonuses to their employees amounting to £1,072, which was equal to 6.6 per cent. upon the wages of the participants. Of the

383 agricultural productive societies 61, employing 435 persons and paying £19,982 in wages, paid bonuses to their employees amounting to a total of £1,111, or 5.6 per cent. upon the wages of the participants.

Of the 80 departments of the industrial societies 14, employing 172 persons and paying wages amounting to £11,161 paid bonuses to their employees amounting to a total of £382, or 3.4 per cent. upon wages; of this total 278, or about 73 per cent., was accounted for by the farming department of the Scottish Co-operative Wholesale Society.

§ 2. Co-operative credit associations.

At the end of 1914 there were at work in the United Kingdom 216 co-operative credit associations — 14 urban and 202 rural — with an aggregate membership of 22,373, as compared with 223 associations and 22,671 members in 1913. The number of societies has thus decreased by 7 and the members by 398.

Of the 216 associations, 51 with 3,988 members were in England and Wales, one with 364 members in Scotland, and 164 with 17,921 members were in Ireland.

All the Irish associations were rural, and the single association in Scotland was urban. Of the 51 associations in England and Wales, 13 were urban and 38 rural.

The amount of loans advanced by these associations in 1914 was £71,700, and the amount repaid (including interest) was £77,108, compared with £72,308 advanced and £81,307 repaid in 1913.

The total capital in 1914 was £170,301, compared with £168,700 in 1913, and the amount owing by borrowers £113,537, compared with £113,693.

The associations are usually managed by unpaid officials, and the working expenses are therefore small. The total working expenses (including interest on capital) of the whole of the 216 associations was £7,732, compared with £7,586 for the 223 associations in 1913.

The aggregate net profit made by all the societies was £964.

The following table gives details for the year 1914 of urban and rural associations in England and Wales, Scotland and Ireland respectively:

	Urban		Rural		Totals
	England and Wales	Scotland	England and Wales	Ireland	
Number of Associations	13	1	38	164	216
Membership	3,148	364	840	17,921	22,273
	£	£	£	£	£
Capital — Shares	7,400	6,659	421	86	14,566
Capital — Loans and Deposits	22,950	59,386	2,350	61,662	146,348
Capital — Reserves	1,124	2,643	369	5,251	9,387
Total Capital	31,474	68,688	3,140	66,999	170,301
Loans advanced	8,592	5,613	1,505	55,990	71,700
Loans repaid (including interest)	9,854	5,596	2,015	59,643	77,108
Owing by Borrowers	10,195	40,114	2,312	60,916	113,537
Working Expenses (including interest on capital)	2,110	2,435	129	3,058	7,732
Net Profit on Year	287	153	32	492	964

§ 3. Cattle and Pig Insurance Societies.

In addition to the co-operative societies in agricultural distribution and production in 1914 there were in England and Wales 63 registered societies for the mutual insurance of the pigs and cattle belonging to their members.

The following table shows the progress of these societies during the five years 1910-1914 :

	Years				
	1910	1911	1912	1913	1914
Number of Societies making returns	58	58	61	63	63
Total membership	3,625	3,600	3,596	3,531	3,522
	£	£	£	£	£
Receipts: Contributions	1,835	1,809	1,822	1,883	1,955
Receipts: Other receipts	507	453	472	491	487
Total receipts	2,342	2,262	2,294	2,374	2,442
Expenditure: Benefits to members	1,751	1,924	1,815	1,784	2,150
Expenditure: Working expenses	388	257	290	285	288
Total expenditure	2,139	2,181	2,105	2,069	2,438
Total funds at end of year	8,105	8,112	8,344	8,610	8,556

Registered pig and cattle societies, however, constituted only a small minority of the total number of such societies. There were about 1,200 unregistered pig and cattle societies in England alone, of which some 400 were in Lincolnshire; but complete information as to the financial operations of these societies is not available.

BRITISH COLONIES.

CO-OPERATIVE CREDIT IN CEYLON

OFFICIAL SOURCE:

PROCEEDINGS OF A MEETING OF CO-OPERATIVE CREDIT SOCIETIES, held at Colombo on 28 April 1914.

§ 1. CONDITIONS OF RURAL LIFE IN CEYLON.

The conditions of rural life in Ceylon differ much, in several respects, from those commonly met with in India, and to a much greater degree from those in the European countries in which co-operative credit has developed.

In India the villager is generally what may be called a tenant in the second degree. The ultimate landlord is the State which receives from the soil a tax often representative of the better part of the revenues of the nominal landlord. The latter exploits in his turn the rural populations who are compelled to work hard in order to secure a bare livelihood after they have paid their dues. In such conditions the native money lenders drive a thriving trade and the usurer does not fail in hardness. The intervention of co-operative credit is therefore useful and experience has proved that it is efficacious.

In Europe the State never stands in the relation of landlord to a population but the great landlord often occupies the position of the State in Ceylon. The tenant has so precarious a hold on the soil that there is no inducement to him to improve his holding nor indeed has the means to do so. Fortunately laws protecting small holdings, laws having regard to internal colonization and co-operative credit societies have come to the tenant's aid.

In Ceylon conditions are very different. The peasant is generally a freeholder. His holding is indeed very limited in extent but nine tenths of the population can call themselves landowners. The usurer is for the most part non-existent, although certain districts are not entirely free from him and although the evil he represents is one which seems to grow with years. The standard of living and of comfort is far higher among the peasants

of Ceylon than among thier contemporaries in India, and their intellectual culture is superior even to that of many agricultural labourers in Europe.

The increase of population has however led to the diminution of individual holdings, unaccompanied by any possibility for the holder to acquire other land or establish himself elsewhere, for he has no capital available for such purposes. He is debarred even from remunerative improvements, such as an increase in the number of his cattle, the use of chemical manures and so forth. On the other hand the cost of his living has risen very much while there has been no corresponding enhancement of his earning capacity. His freedom of action as regards new enterprise is moreover strictly limited by all the measures intended to protect large owners and better to preserve the resources of the State. His indebtedness to the capitalist landlord increases daily, and the latter, desiring eventually to acquire his holding, advances money to him at a high rate of interest.

No further argument is necessary to justify the establishment of co-operative agricultural credit in Ceylon.

§ 2. The Organization and the Working of Co-operative Credit.

In 1909 the government nominated a commission which had the duty of making an enquiry into land and credit banks. Its report, published in 1910, was followed by Ordinance No. 7 of 1911 " for the constitution and control of co-operative credit societies for the encouragement of thrift and self-help, and of co-operation among agriculturists, artizans and persons of limited means ".

On the 28th of April, 1914, thanks to the propaganda of the *Ceylon Agricultural Society,* whose secretary published a popular pamphlet in the vernacular, 35 local societies were in full working order and 21 others were in course of formation.

Each of these societies except one has a capital composed of very small shares which can be bought by the poor as well as by the rich. Each member may possess several shares but the number of his shares is limited. The subscribed capital of the 35 societies in full working order reaches a total of 101,500 rupees (1), an average of 2,900 rupees for each society. The total paid-up capital at the end of 1913 was 8,202 rupees, an average of 342 rupees to each society in full working order. The paid-up capital was thus 12 % of the subscribed capital. Ten societies have as yet paid up no capital, but on the other hand two societies, those of Walapane and Handapangoda, have paid up the whole of their subscribed capital. Of these the first was constituted with a capital of 1000 rupees, the second with one of 500 rupees. In both the shares are of one rupee each.

(1) Under the Act of 1899 the pound sterling is legal tender for 15 rupees.

Persons of either sex can belong to a co-operative society so long as they are domiciled within the territory reserved by it as its sphere. Nothing is required of them saving that they be of good character. At the end of 1913 the total membership of the societies was 1,820. The maximum membership of any one society was 176, the minimum 52.

Nine societies have adopted the rule of the limited liability of their members; the rule of unlimited liability has been adopted in the 26 others.

The territorial sphere of each society is as extensive as possible, owing to the difficulty of finding a sufficient number of people able to direct the nascent movement. But a fortunate tendency is already apparent to divide among several local societies territories which originally constituted the sphere of one. Enlightened and experienced members of the societies must, as they come into being, hasten this development.

Loans are made especially but not exclusively with a view to agriculture. They are made also for the encouragement of small industries — carpentry, pottery, basket-making and so forth — and, finally, to help to free the members of the societies from debts incurred to those not members. The loans are all for short periods: none has been made for more than a year. Up to the present (28 April 1914) they number seventy and reach the total sum of 3,816 rupees. The amount of each varies from 5 to 250 rupees, the latter sum constituting so far the maximum. The security for these loans, fixed by the rules, varies with the societies: some take into account the borrower's contribution to the society's capital; others leave the directing committee to decide each case on its merits. Eight loans, amounting to 550 rupees, have been entirely repaid and the 64 others are in regular course of repayment. In almost every case repayment has been guaranteed by one or more members of the society who are friends of the borrower; but in the case of loans for other than agricultural and industrial purposes the society asks for more complete guarantees. One or two societies have established the principle that members of committee cannot obtain loans while they are in office. This rule is in force in all the societies as regards the president.

The rate of interest, which is always fixed by the rules, varies with local conditions. The lowest rate is 6 %; the highest 12 %, in other words one rupee a month for a loan of one hundred rupees. These figures may seem very high to European readers, but it is important to compare them with the rates at present demanded by private individuals in Ceylon. Such rates are never less than 36 % and often surpass this figure considerably. Thus the peasants of the province of Uva are often obliged to give two bushels of rice for every rupee they borrow; those of the North Central Province give one bushel of rice for a loan of 50 or 75 cents, and so forth.

The societies provide for receiving deposits and one of them has already received such.

The first profits have amounted to 23.05 rupees; and this sum has been transferred to the reserve fund, which is contemplated by the rules of

all the societies and is intended to reach a considerable sum. The Society of Puttalam has fixed its reserve fund at 500 rupees; the Society of Talpe Pattu at 1000 rupees. A society cannot dispose of its reserve fund, which, according to the rules of all the societies, must be deposited in the Ceylon Savings Bank whence it cannot be withdrawn without government authorization.

The relations of the societies to the Post Office Savings Bank are the subject of a special ordinance. The Savings Bank opens with all the societies especially privileged accounts. Each society can annually deposit a sum of 5,000 rupees, and as much as 600 rupees in a day, at every post office of which the mails are conveyed by runner. Needless to say the treasurer of each society can keep in his safe a certain sum for immediate needs. At the end of 1913 a sum of 3,940.50 rupees was lying to the credit of the societies in the Post Office Savings Bank.

The general expenses of the societies are very small, for most of them are entirely administered by persons who have in them no pecuniary interest and receive no payment.

Finally the government contemplates the granting of loans to the co-operative credit societies; and has awarded a sum of 600,000 rupees to be allocated in loans to native agriculturists. To obtain a loan societies must :

(1) be registered;

(2) obtain the consent of the Government to their choice of a president.

Hitherto only one society, that of Walapane, has obtained a loan. This society, which has 112 members and a subscribed capital of 1,000 rupees, has borrowed 660 rupees from the government.

§ 3. What remains to be done.

As has been seen co-operative credit in Ceylon is in its infancy. There is no blindness to the fact that the institution cannot fully develop until a central bank exists side by side with the local societies.

At the congress of representatives of co-operative credit societies, held on 28 April 1914, Mr. W. Arthur de Silva very completely defined the object which this bank would have.

(1) It would provide local credit societies with the capital they would need, on the double guarantee, individual and collective, of their members;

(2) it would enable the peasants to acquire land, by means of loans for long terms or mortgages;

(3) it would allow local societies to obtain the necessary funds for the development of small local industries, for the acquisition of manures and seeds, and for the better organization of markets. At present local industries in the villages are numerous, and they could easily be made

flourishing if the peasants employed on them could obtain at reasonable prices the primary material which they need. Unfortunately workers in metal pay for it twice or thrice its normal price. The lace-makers, the embroideresses and the makers of fancy articles have much difficulty in procuring material of good quality. The weavers can obtain neither thread nor looms. The dyers pay an exorbitant price for goods of a quality so bad as to depreciate considerably the value of their work. Agriculturists can obtain neither manures nor seeds at a reasonable price. A co-operative society could buy primary material of superior quality at a price which would allow of profit, and distribute it among the work-people. It might equally well turn its attention to the sale of products, for the distance of markets now compels the peasants to make long and burdensome journeys. It may be affirmed that cocoa and the arec nut could, for instance, be very profitably sold by co-operative societies ; and these might, on the other hand, acquire, for purposes of re-sale to their members, clothes and various articles of food, which today are bought at high prices from pedlars and small local shopkeepers.

For all these reasons it is likely that the institution of a central bank will be a work of the near future.

PORTUGAL.

THE WORK OF AGRICULTURAL MUTUAL CREDIT SOCIETIES.

SOURCES:

JUNTA DE CRÉDITO AGRÍCOLA. Relatorio e contas da gerência de 1914-1915. (*Commission of Agricultural Credit. Report and Account for the year* 1914-1915).

As a result of the alterations made by the law of 30th June 1914 in the organization of rural credit as fixed by the decree-law of the 1st March 1911, we at an earlier date examined the position of agricultural mutual credit societies in Portugal and the work of the Commission of Agricultural Credit (1). The last report of this commission gives us an opportunity of following up for a further year the development of the societies and the tendency of their operations, in view particularly of the innovations contained in the second law and the abnormal conditions prevailing in European countries, the period under consideration covering 1 July 1914 to 30 June 1915.

§ 1. FORMATION OF NEW MUTUAL SOCIETIES.

In the course of the financial year 1914-1915, eleven new agricultural mutual credit societies were founded, being a number equal to that of the previous year and raising to 48 the total number of these institutions: which comprise three limited liability societies, forty-four having unlimited liability and one having mixed liability, a form created by the law of 1914.

The following is the distribution of these different societies in the various districts of the country:

(1) Issue of April 1910.

District	Locality of Societies
Beja	Cuba.
	Brinches.
	Moura.
Evora	Evora Monte.
Lisbon	Torres Vedra.
Aveiro	Gandara de Cambra.
Guarda	Manteigas.
	Valhelhas.
Vila Rial	Bertelo.
Viana do Castelo	Goutinhaes.
Leiria	Leiria.

Beja is the district in which mutual credit societies have multiplied with the greatest speed. Indeed, out of the fourteen communes which constitute it, only four at the present time are without a society.

On the other hand in the districts of Porto, Viseu, Coimbra, Castelo Branco and Faro this form of organized credit has found a less favourable soil, as up to the present it has not been found possible to establish any agricultural credit society there, despite the efforts undertaken to that end with the energetic assistance of the Agricultural Credit Commission. Nevertheless, the work of preparation, which is being actively pushed forward, justifies the hope that the farmers of these regions may soon be able to enjoy the benefit of cheap financial accommodation.

The praiseworthy efforts of the Commission of Agricultural Credit were directed particularly towards convincing agricultural unions of the usefulness of credit societies, and obtaining their co-operation in order to make known to farmers the beneficial results of mutual organization. The unquestionable apathy however of a number of unions unfortunately retards the progress of the movement. If the country be divided into two great regions by a line following the boundaries separating the districts of Leiria, Santarem and Portalegre from those of Coimbra and Castelo Branco, it is seen that south of this line there are 65 agricultural unions and 39 mutual credit societies, the latter being thus in the proportion to the former of 60 %, while north of this line the number of unions is 51 and the proportion to them of the 9 credit societies only 17.6 %. We may add that in the southern region 26 unions are found without credit societies, and in the north this number amounts to 48.

There is plenty to do therefore, and the propaganda of the commission may be profitably carried on, particularly in the northern zone, where the rural population do not as yet appear sufficiently to realize the benefits resulting from financial facilities. For the rest, it is probable that the teaching of experience during the present period will enable the organizers to show farmers, by means of precise examples (as we shall see later on when

examining the operation of the financial societies in detail), all that they may reasonably expect from these societies.

§ 2. Enforcement of the new provisions of the law of 30 June 1914.

a) Long date loans.

The law of 30 June 1914 extended the sphere of action of agricultural credit by adding the following to the different modes of utilizing loans specified in the decree-law of 1911 : *a*) the purchase of thoroughbred cattle and all substances for controlling cattle disease ; *b*) redemption of the *foros* ((long-date loans) encumbering cultivated lands ; *c*) clearance of mortgage debts of an interest over 6 % and not exceeding 5000 francs ; and *d*) discounting of warrants issued against agricultural produce deposited in general storehouses. The report of the commission unfortunately gives few or no indications as to the extent to which the provisions contemplated under letters *a*), *b*) and *d*) have admitted of being enforced.

On the other hand, the report furnishes interesting details relative to the long date credit operations instituted by the new law, with which operations the commission had to deal for the first time during the year 1914-1915.

The following table, which requires no additional explanation, informs us as to the first stage accomplished in this direction :

TABLE I. — *Long date Loans granted to Agricultural Credit Societies at 30 June 1915.*

Societies	Purpose of Loan							
	Cultivation				Repayment of Mortgages			
	Number	Amount	Period of loan — Years	Nature of operation	Number	Amount	Period of loan	Rate of interest of mortgages cleared
Bombarral	1	3,050 $ 00	15	Planting vines.	4	3,050 $ 00	15	7 to 9 %
Viana de Alentejo	4	2,500 $ 00	15	Rebuilding a house, constructing barn, and planting vines.	—	—	—	—
	1	350 $ 00	5	Clearing land.	—	—	—	—
Mourão	—	—	—	—	1	400 $ 00	10	7 %
Alcaçovas	1	300 $ 00	6	Building dwelling house and sinking well.	—	—	—	—
Vila Flor	—	—	—	—	5	3,314 $ 00	15	from 9 to 12 %
Alcobaça	—	—	—	—	1	1,000 $ 00	4	7 %
Pernes	1	261 $ 00	15	Clearing for vines.	—	—	—	—
Alvorninha	—	—	—	—	2	695 $ 00	15	9 %
Ourique	—	—	—	—	1	1,000 $ 00	6	—
Peniche	—	—	—	—	1	184 $ 50	15	8 %
Manteigas	1	105 $ 00	15	Clearing land, vine planting and fencing.	—	—	—	—
	1	38 $ 00	12	Fencing.	—	—	—	—

TABLE II. — *Number and value of the Freehold and Long Lease Propert*

Societies	Urban Properties					Rur	
	Freehold		Leasehold			Freehold	
	Number	Value	Number	Value	Amount of charges	Number	Value
Bombarral	60	10,769 $ 04	1	78 $ 60	18 $ 00	276	73,886 $
Salvaterra de Magos	34	7,462 $ 50	—	—	—	31	10,564 $
Viana do Alentejo	10	5,554 $ 75	2	1,119 $ 00	176 $ 33	21	46,715 $
Mourão	41	8,364 $ 71	—	—	—	144	32,116 $
Aljustrel	39	26,210 $ 31	5	1,513 $ 90	39 $ 20	62	53,610 $
S. Teotonio	10	1,778 $ 70	—	—	—	75	20,675 $
Alcáçovas	18	3,885 $ 40	4	384 $ 40	30 $ 60	28	30,425 $
Castro Verde	5	1,725 $ 00	1	134 $ 40	$ 60	6	7,701 $
Serpa	105	31,445 $ 66	—	—	—	732	293,422 $
Vila Flor	115	5,647 $ 33	—	—	—	1,241	62,138 $
Alcobaça	12	12,248 $ 85	—	—	—	62	20,483 $
Pernes	4	503 $ 50	—	—	—	55	48,721 $
Alcochete	17	6,878 $ 10	—	—	—	34	6,600 $
Lourinhã	2	1,854 $ 75	—	—	—	4	9,707 $
Alvorninha	50	13,446 $ 30	—	—	—	313	27,198 $
Eborense	11	9,865 $ 50	3	1,699 $ 18	64 $ 22	33	152,799 $
Ourique	8	2,331 $ 10	1	181 $ 64	5 $ 86	116	89,645 $
Moita do Ribatejo	22	15,254 $ 25	2	1,511 $ 70	48 $ 60	13	13,858 $
Aldeja Galega do Ribatejo	23	11,730 $ 80	16	5,229 $ 47	828 $ 32	36	24,792 $
Ferreira do Alentejo	13	6,887 $ 60	4	2,263 $ 95	4 $ 00	22	112,483 $
Peniche	9	1,861 $ 50	—	—	—	45	15,571 $
Tomar	—	—	—	—	—	11	8,776 $
Chacim	4	1,543 $ 20	—	—	—	22	5,260 $
Santarêm	25	13,880 $ 37	12	4,938 $ 86	1,697 $ 40	3	2,398 $
Manteigas	28	805 $ 35	—	—	—	9	322 $
Leiria	4	9,027 $ 75	—	—	—	7	15,736 $
Campo Maior	1	841 $ 80	3	2,035 $ 49	374 $ 26	5	21,043 $
Santa Marta de Penaguião	1	132 $ 00	—	—	—	15	10,950 $
Aggregate Total	671	211,836 $ 12	54	21,090 $ 59	3,287 $ 39	3,457	1,217,625 $

rming the joint Capital of the unlimited liability Societies on 30 June 1915.

Properties			Total				
Leasehold			Freehold		Long Lease		
Number	Value	Amount of charges	Number	Value	Number	Value	Amount of charges
4	1,829 $ 40	408 $ 60	336	84,655 $ 76	5	1,908 $ 00	426 $ 60
—	—	—	65	18,027 $ 00	—	—	—
1	1,283 $ 00	392 $ 92	31	52,270 $ 70	3	2,402 $ 00	569 $ 25
41	10,109 $ 86	1,473 $ 65	185	40,480 $ 71	41	10,109 $ 86	1,473 $ 65
16	2,141 $ 70	2,300 $ 70	101	79,820 $ 40	21	3,655 $ 60	2,339 $ 90
2	446 $ 00	888 $ 27	85	22,454 $ 60	2	446 $ 00	888 $ 27
9	10,685 $ 20	445 $ 40	46	34,310 $ 70	13	11,069 $ 60	476 $ 00
—	—	—	11	9,426 $ 64	1	134 $ 40	$ 60
7	5,496 $ 70	1,197 $ 20	837	324,868 $ 27	7	5,496 $ 70	1,197 $ 20
—	—	—	1,356	67,805 $ 35	—	—	—
1	1,348 $ 15	48 $ 50	74	32,731 $ 94	1	1,348 $ 15	48 $ 50
—	—	—	59	49,224 $ 88	—	—	—
4	3,679 $ 20	115 $ 03	51	13,478 $ 30	4	3,679 $ 20	115 $ 03
—	—	—	6	11,562 $ 16	—	—	—
11	1,665 $ 46	721 $ 66	363	40,644 $ 94	11	1,665 $ 46	721 $ 66
32	7,537 $ 62	2,640 $ 63	44	162,664 $ 73	35	9,236 $ 80	2,704 $ 85
7	13,083 $ 68	3,338 $ 46	124	91,876 $ 12	8	13,265 $ 32	3,344 $ 32
13	10,024 $ 12	2,501 $ 02	35	29,112 $ 58	15	11,535 $ 82	2,549 $ 62
27	10,411 $ 05	2,710 $ 68	59	36,523 $ 71	43	15,640 $ 52	3,539 $ 00
5	3,291 $ 58	874 $ 93	35	119,371 $ 35	9	6,185 $ 53	878 $ 93
—	—	—	54	17,432 $ 70	—	—	—
—	—	—	11	8,776 $ 94	—	—	—
—	—	—	26	6,803 $ 40	—	—	—
2	4,346 $ 68	395 $ 54	28	16,278 $ 57	14	9,285 $ 54	2,092 $ 94
—	—	—	37	1,127 $ 75	—	—	—
1	3,902 $ 40	25 $ 98	11	24,764 $ 07	1	3,902 $ 40	25 $ 98
2	4,270 $ 42	448 $ 22	6	21,885 $ 60	5	6,305 $ 91	822 $ 48
—	—	—	52	11,082 $ 00	—	—	—
85	96,182 $ 22	20,927 $ 39	4,128	1,429,461 $ 87	239	117,272 $ 81	24,214 $ 78

b) *Properties on Long Lease and the Joint Capital of the Societies.*

It is as well to recall the fact that the principal modification made in the system of mutual agricultural credit by the law of 1914 was in reference to the nature of the properties accepted as security for the loans. Under the law of 1911, grants of credit from the societies organized with joint unlimited liability of their members were to be limited to the amount of their capital plus 50 % of the value of the rural or urban property without encumbrance, freehold and clear, of all the members. Properties encumbered with long lease charges — and the majority of rural estates are in this position — were therefore precluded from the benefits of the law. The drawbacks to this enactment having become evident in practice, the law of 1914 allows as security for the advances received by the societies from the Commission of Agricultural Credit and by members from the society to which they belong, properties held under long lease, urban and rural. It has thus considerably increased the possibilities of action of the mutual credit societies.

The joint capital of the limited liability societies has grown markedly during the financial year 1914-1915 as a result of this measure. The *urban* properties coming within the above category, and now added to the freehold properties, have numbered 54, representing a value of 21,090 $ 59; the *rural* properties in the same condition which have gone to swell the joint capital have reached the number of 185 with a value of 96,182 $ 22, or a total increase for the whole of the societies of 117,272 $ 81. The value of the freehold properties forming security for the credit enjoyed by the societies amounted, on 30 June 1915, to 1,429,461 $ 87. It is seen therefore that in the space of one year the leasehold properties allowed to benefit by the advantages of credit have represented more than 12 % of the contribution of members in freehold properties during the same year. Relatively to the aggregate amount of the capital of the societies, which was on 30 June 1915, 1,546,734 $ 68, the value of the leasehold properties comprised within it represents about 7.6 %. We may add that the charges encumbering these properties are, in the case of the urban properties mentioned above, 3,287 $ 39, in that of the rural properties 20,927 $ 39, and in all 24,414 $ 78. In conformity with the enactments of the law, the value of these properties was assessed after deducting the amount of the charges encumbering them.

The preceding table gives, for each society, the details of the properties of both categories.

In order to indicate still more precisely the progress accomplished, we may say that the financial year to which the table relates shows an increase in the joint capital of the societies of 1294 properties of the value of 588,361 $ 59. These figures are made up as follows : 268 urban properties representing 106,877 $ 99 and 1026 rural properties representing 481,483 $ 60.

c) *Mixed Societies.*

Finally it is desirable to remind the reader that the law of 1914 established, in addition to the limited and unlimited liability societies, a third category, that of mixed societies, in which the liability of some of the members is unlimited while that of the others is limited.

One society only of this kind has been founded hitherto, that of Vale do Cambra in the district of Aveiro. It is of quite recent creation, and at the time when the report from which we take this information was drawn up it had not yet begun its activities. It appears however to be fairly unimportant, as it only numbered 21 members when founded. Yet its activities will not fail to enlighten the commission as to the advantages represented by the adoption of this system, its value as an example and its educative action. In reality, however, this form of organization was, in the intention of the legislator, only a transition stage through which, in those localities where the spirit of association is undeveloped, the unlimited liability societies which better respond to the needs of the rural population might subsequently be created.

§ 3. Some data as to the general work of the agricultural credit societies in 1914-1915.

Portuguese agriculture has to some extent experienced the disturbing effects of the European war. Owing to the disorganization of international exchanges and the economic and financial disturbances thence resulting, the need of money has increased and in several parts of Portugal the credit societies have saved the situation. "Were it not for this society," says the management of the Society of Moita do Ribatejo, in its report, "the majority of the farmers would have been unable to sow their fields". In this part of the district of Lisbon the staple product is potatoes, but the tubers for sowing come from abroad, in this instance from France. The Portuguese Government, though it obtained from the French Government a licence for the export of the necessary quantity, was not in a position to import it in good time for the needs of cultivation. Thanks to the above society this difficulty was solved. The society provided the money which enabled the local union to send an agent abroad, freight a sailing vessel, pay all the costs of transport and insurance as well as import duty, and supply its members on good terms with the seed potatoes which in the autumn contributed a valuable quota to the feeding of the nation. This result is deserving of particular notice from the general point of view, inasmuch as it testifies to the excellent effects obtained by the collaboration of the societies with the unions, and the value of the result is the more appreciable in this instance because Portugal, in order to meet all eventualities which might result from difficulties of supply

and increased freight, had been compelled like many other countries to restrict free business in grain, to regulate the milling industry, and to promulgate precautionary measures for the manufacture of bread in an entire series of laws and decrees.

On examining the work of the agricultural credit societies it is observed that the majority of loans applied for by their members during the year under consideration were intended for purchasing manure. Though previous years likewise showed a relative predominance of this method of utilizing the sums borrowed, it must be pointed out that while up to 30 June 1914 the number of loans granted under this head by the mutual societies had amounted to 276, in the year 1914-15 alone they reached 277. If these operations covered a normal period, the result would be brilliant and would testify to the technical progress of farmers. The phenomenon however is chiefly due to the extremely high prices of chemical manure, which are absolutely prohibitive to many cultivators, so that a fairly considerable area of land was left fallow or was sown without having received sufficient manure. To the inability on the part of farmers to procure the necessary manure the increase observed in the purchase of livestock, to utilize pasturages and mast, is likewise due.

The principal consequence of the war to mutual societies lies however in the numerous extensions of credit granted to them by the commission. Normally, the capital lent to agriculturists is repaid during the agricultural year, when the crop is sold. During the year under consideration however some outstanding debts could not be recovered or were very tardily collected by the farmers. The high prices reached by certain products, indispensable to cultivation of the soil, aggravated still further this difficult position ; to meet this increase of charges therefore the farmers had to resort either to new loans to make up the deficit in their receipts, or to extensions of time for payment enabling them to wait until they recovered the sums due. Such were the grounds which determined the commission to receive favourably all substantiated applications for extension of time for payment from the mutual societies. Out of 956 loans granted from the special agricultural credit fund, 499 were prolonged for a period of 1 to 12 months. Nevertheless the proportion of loans which will be repaid within the total period of one year (65.1 %) considerably exceeds that of the loans the repayment of which will only be made within a longer term (34.8 %).

The total amount of the prolonged loans has constantly increased since the commission entered upon its activities. During the first financial year (November 1911 to June 1912) there were only 3 loans for a total of 560 $ 00, of which the maturity was prolonged ; in the second year there were 85 for 12,556 $ 11.

The following table gives the total figures of the third and fourth year, and details for each society.

TABLE III. — *Extensions granted by the Agricultural Credit Commission to the Agricultural Societies.*

Societies	1913-1914		1914-1915	
	Number	Amount	Number	Amount
Bombarral	74	18,481 $ 50	127	30,737 $ 50
Elvas	12	14,400 $ 00	10	12,730 $ 00
Salvaterra de Magos	8	770 $ 00	9	5,220 $ 00
Viana de Alentejo	13	3,205 $ 00	13	7,110 $ 00
Mourão	48	3,811 $ 90	40	8,734 $ 50
Aljustrel	21	7,158 $ 16	31	11,163 $ 00
S. Teotónio	1	30 $ 00	1	1,000 $ 00
Alcáçovas	8	3,321 $ 32	1	6,000 $ 00
Castro Verde	2	400 $ 00	2	600 $ 00
Serpe	6	5,367 $ 00	53	23,771 $ 00
Vila Flor	7	3,675 $ 70	10	7,090 $ 00
Alcobaça	6	1,000 $ 00	14	3,051 $ 00
Pernes	3	557 $ 00	26	11,418 $ 00
Alcochete	1	400 $ 00	11	1,488 $ 00
Lourinhã	4	710 $ 00	5	2,150 $ 00
Alvorninha	6	1,175 $ 00	63	12,692 $ 32
Eborense	3	3,157 $ 71	13	23,572 $ 00
Ourique	3	—	7	11,500 $ 00
Moita do Ribatejo	—	—	17	6,300 $ 00
Aldeia Galega do Ribatejo	3	1,300 $ 00	25	5,823 $ 00
Ferreiro do Alentejo	—	—	7	7,200 $ 00
Peniche	—	—	2	1,250 $ 00
Tomar	—	—	10	2,850 $ 00
Santarêm	—	—	2	550 $ 00
Total	226	68,920 $ 29	499	204,001 $ 08

During last financial year (1914-1915) the commission granted the societies, out of the special agricultural credit fund, 956 loans, for an amount of 377,766 $ 93, a sum exeeding the aggregate amount of loans granted during the three preceding financial years (369,409 $ 40). Of this

number, 441 loans were granted on personal surety, for 174,671 $; 167 for 76,626 $ 18 on mortgage, and 348 for 126,469 $ 75 on other security. Therefore relatively to the total the first class represent 46.2 %, the second 20.2 % and the third 33.5 %.

The societies for their part allowed 1355 loans for a total of 482,491 $ 65, made up as follows :

State Capital :

On personal surety. . .	441	loans of a total value of	174,671	$ 00
» mortgage	167	» »	76,626	$ 18
» other security . . .	348	» »	126,469	$ 75

Capital belonging to the Societies themselves.

On personal surety. . .	182	loans of a total value of	53,041	$ 40
» mortgage	56	» »	7,479	$ 00
» other security . . .	161	» »	44,204	$ 32

For the two groups of Capital together.

On personal surety. . .	623	loans of a total value of	227,712	$ 40
» mortgage	223	» »	84,105	$ 18
» other security . . .	509	» »	170,674	$ 07

It will be observed that there is a marked difference between the amount of the personal credit operations and that of the operations on mortgage or other security.

The popularity of the former is the best proof of the growing confidence of the public in the agricultural societies and the progress of the mutual system in relation to rural credit.

The loans granted on security other than mortgage were, as to one third of their number and about one half of their amount, granted on grains and pulses (107 for 247,582 $ 33) ; next in order of importance were those on machinery (17 for 66,219 $ 10), wine (91 for 51,591 $ 00), vessels, casks, barrels etc. (76 for 43,757 $ 35), furniture and other articles (10 for 20,449 $ 00), etc.

With regard to the individual amounts of the loans, it was just as in previous years small farmers who chiefly benefited by the credit of the agricultural societies. During last financial year loans of sums between 100 $ 01 and 250 $ were the most frequent (204) ; next come the loans of sums from 250 $ 01 to 500 $ (186).

Loans up to 500 $ number 777, and above that amount only 179 were granted, including collective loans to unions; consequently, the former represent 81.2 % and the latter 18.7 % of the total.

Finally, with reference to the objects of the short date loans, we

have already pointed out and explained that the purchase of manure ranks first (277 loans) among them.

The payment of wages to agricultural labourers, which ranked second in previous years, is now only fourth (116). The second place belongs to vine-growing, the development of which is attested by the more considerable sums devoted to that purpose in the regions of Bombarral, Alvorninha and Aldeia Galega. The third place belongs to livestock (173) and the fifth to harvest expenses (107).

In conclusion, the progress of agricultural societies has been strongly marked, not so much by the increase of their number as by the growth of their activities, and this progress has, in abnormal economic circumstances, allowed them to bring into strong prominence the advantages with which co-operative organization of credit provides farmers.

MISCELLANEOUS INFORMATION RELATING TO CO-OPERATION AND ASSOCIATION IN VARIOUS COUNTRIES.

CANADA.

WORK OF THE CO-OPERATIVE ASSOCIATIONS IN SASKATCHEWAN. — *The Public Service Monthly*, Regina, June, 1916.

On May 1, 1916, there were in Saskatchewan 261 associations registered under the Agricultural Co-operative Associations Act. The following statistics in regard to the business transacted during 1915 will be of interest.

The 173 associations that have reported on the business done by them during 1915 have a total of 5,537 shareholders, and a total paid up capital of $ 39,421.49. Their total assets amount to $ 105,322.37 and their total liabilities, including paid up capital, amount to $ 82,956.57.

The returns show that 138 associations engaged in co-operative purchasing of farm supplies ; one association confined its activities to the marketing of live stock ; nine associations engaged in live stock marketing along with other lines of business. Nineteen associations, the majority of which were organized during November and December, did not transact any business during 1915.

It is evident that widespread interest is being taken in co-operative live stock marketing. In 1914, nine associations marketed stock ; 50 carloads were sold and the net proceeds amounted to approximately $ 42.000. In 1915, ten associations shipped stock co-operatively ; 140 carloads were handled and the net price realized was $ 150,512.76. The following data compiled from special reports supplied by the managers of six associations give some idea of the work carried on and the savings effected

Name	Number of cars.	Number of shippers	Weight	Manager's estimate of increase in price per lb.	Amounts saved
					$
Guernsey Co-operative Association, Limited	8	72	137,590	3/5 c.	825.54
Lloydminster » » »	57	293	876,380	1/3 c.	2,921.27
Maidstone » » »	17	116	514,113	1 1/2 c.	4,711.70
Rozilee » » »	9	80	130,562	1/2 c.	652.81
Watson » » »	18	147	372,040	1 1/2 c.	5,580.60
Young » » »	9	119	112,181	1 1/2 c.	1,682.71

The total value of other farm produce marketed was $ 8,923.03, and the total value of farm supplies handled was $ 805,456.88. Considering the small amount of capital invested the turnover during the year is most gratifying, and the net profit of $ 19,102.27 on a paid up capital of $ 39,421.49 is very satisfactory.

BRITISH COLONIES.

CO-OPERATIVE TRANSPORT FOR LIGHT PRODUCE IN RHODESIA. — *The Rhodesia Agricultural Journal*, Salisbury, April 1915.

On the north side of the railway at Marandellas there is a group of farms situated roughly 20 miles from the station. Of these, two are situated on the main road, respectively 18 and 20 miles from the station. The remainder, eight in number, lie around these two and are distant from one or the other from 1 ½ to 5 miles.

The occupiers of the ten farms formed themselves into a syndicate, and purchased for £30, on the hire-purchase system, a light covered four-wheeled van capable of carrying 1,200 lbs regularly.

Each member of the syndicate undertook to supply two oxen and gear complete for one month at a time in turn as notified by the secretary, and to subscribe 10*s.* per month for twelve months towards working costs and the purchase of the van.

Six oxen pull the van. A native driver and leader (at a cost of 35*s.* per month for the two) are all the paid labour employed. These boys only work four days a week for the syndicate, but an arrangement has been made with the secretary, at whose farm the van is stabled, to feed them in return for their labour on the remaining days.

The syndicate is managed by the secretary and a committee of three. The system of working is as follows: The two farms on the road are receiving stations, and their owners are members of the committee. The van starts from the further farm twice a week, travelling to the station one day, and back the next, so as to connect with the principal out-going mail trains. Each member is supplied with an ordinary delivery book (costing 9*d.* for 100 pages) having a detachable page and a counterfoil. When he sends goods to the receiving station he enters them on the detachable page, with instructions, and sends the book to the receiving station with the parcel. The receiving station retains the detachable page and initials the counterfoil, returning it by bearer to the member. The receiving station then enters the parcel or goods in the driver's book, and files the detachable page. Upon arrival at the railway station, the forwarding agent initials the book, after checking the goods. Thus the syndicate retains the consigner's original instructions, and as the parcel passes from one hand to the other a signature is received for it, rendering the tracing of any error

a simple matter. On the inward journey the same method is used. The forwarding is done at the station by contract for the syndicate at one third less than ordinary rates.

The rules adopted by the syndicate are more or less as follows. On the journey to the station each member is allowed to send up to 100 lbs., perishable goods always having precedence. On the inward journey the same rule applies, but should the parcels for nine members only amount to, say, 200 lbs., and the tenth member have goods up to 800 lbs. awaiting despatch, the 800 lbs. may be carried on the van, or, in other words, the full carrying capacity may be utilized. Any member may ride on the van and carry luggage with him, provided the maximum load is not exceeded. Passengers other than members of the syndicate are charged 5*s.* per journey, and 1*d.* per lb. for luggage over 30 lbs.

The van leaves the 20 mile point at 8 a. m., and reaches the station at 5.30 p. m., returning in the same time on the following day. These times were maintained for several journeys in wet weather without any appreciable harm to the oxen.

It should be remembered that half the monthly subcription of 10*s.* goes towards the purchase of the van, and will cease in twelve months; therefore, it should not, strictly speaking, be reckoned as working costs. Perhaps it will be better, however, in order to be on the right side, to reckon the full 10*s.* It is found that the ten members between them save five post boys per week at a cost of 10*s.* per week, and they now get their mail twice a week instead of once, as formerly. This is a saving of 1*s.* a week per member. In practice, it is found that nearly every subscriber in turn uses the van for goods weighing 600 lbs. or 800 lbs. coming from the station. Whenever this happens, reckoning at ordinary transport rates, a saving of 6*s.* or 8*s.* is effected. During the last few weeks various members have used the van for such things as two bags of salt, bags of fertiliser, two rolls of fencing wire, a large box of groceries, and so on, all of which things were urgently needed at the time, and under ordinary circumstances would have entailed a span or half a span of oxen, a wagon and two boys being off the farm for two days.

BRITISH INDIA.

NEW MEASURES IN REFERENCE TO THE STATISTICS OF CO-OPERATIVE SOCIETIES.

The government has issued the following instructions in reference to co-operative society statistics.

1. Statements should be submitted annually to the government of India by 1 October.

2. If final corrected figures cannot be supplied by that date, an advance copy of the figures should be sent and the final figures supplied as soon as possible afterwards.

3. The statements should include statistics for all societies registered under the Acts of 1904 and 1912 and should not include statistics of societies not so registered. A society which has been liquidated, will not appear as a society in the returns, but the outstanding loans by, or to, such society will appear as loans by, or to, a society.

4. The statements represent the data required by the government of India and it is open to local governments to prescribe for submission by societies such additional data as they may think necessary either for statistical or for audit purposes.

5. The provincial totals for the preceding year should be shown in a different type in each statement.

6. Annas and pies should not be given in any of the statements.

7. Separate statements will be prepared for (1) central banks; (2) agricultural primary societies; and (3) non-agricultural primary societies; and a statement will also be submitted for (4) Unions.

Central Banks.

8. "Central banks" include provincial banks, district banks, central banks, banking unions and all other societies constituted with the object of lending to individual societies, and tapping deposits from a larger area than that of the primary agricultural or non-agricultural society. All central banks will be considered to be credit banks with limited liability and need no interior classification for the purposes of these returns. The only exception is in the case of central re-insurance societies for which a separate statement F has been prescribed.

9. Central banks in addition to the statement of their new operations will also submit an annual receipts and disbursements statement, balance sheet and profit and loss statement. Central banks which work independently, *i. e.*, which are not affiliated to another central or district bank (as is the case with some banks in the United Provinces) will also submit quarterly finance statements in the form prescribed below. The quarterly finance statements will not be included in the annual returns published by local governments. They should be submitted by central banks to the registrar as soon as possible after the end of the quarter to which they relate and should be forwarded by him in a consolidated form to such authority as may hereafter be determined.

Primary Societies.

10. Agricultural societies are those in which the majority of the members are agriculturists, *i. e.*, persons whose main occupation is the cultivation of the land or the rearing and management of the live-stock or in which

the object is mainly agricultural. Other societies are classed as non-agricultural.

11. In the statements the societies should be treated under six different classes.

The six classes are : —

I. Credit. — These will include societies which lend grain for seed or maintenance, as well as those which lend cash.

II. Purchase, and Purchase and Sale — These are societies intended to facilitate the purchase of agricultural requisites for members, such as societies which purchase seed, manure, implements, etc., for sale to their members. Societies of this character which also collect for joint sale the produce of members without making this their main object will be included in this class.

III. Production. — These are societies which have for their chief object an act of production without proposing to themselves sale as a direct object. This also would include societies for joint irrigation, for collective use of machinery, for assistance in horse and cattle breeding, etc.

IV. Production and Sale. — This class includes societies in which these two functions are united or in which one or the other predominates without it being possible to make a clear distinction between them. It will cover all societies whose main object is the joint sale of any commodity whether such commodity is produced or worked up or prepared for sale by the society itself or by the members individually. It comprises all co-operative creameries, butcheries and distilleries, as well as societies whose main object is the sale of grain, cattle, ghi, eggs, etc., produced by the members.

V. Insurance.

VI. Other forms of co-operation.

12. The figures for insurance societies will be given in a special statement E. Those for the other classes will be given in forms for agricultural and non-agricultural societies.

13. The government of India desire that local governments shall insist on all societies submitting to the registrar a statement of receipts and disbursements, a balance sheet and a statement of profit and loss. This is regarded as essential to the proper training of each individual society in accountancy and as a guarantee that the books are properly kept.

It is not, however, desired that these three statements should be compiled into district or provincial totals in the registrar's office and all that the government of India require is that the salient totals should be ascertained so far as is necessary for filling up statements B and C.

14. The figures in all statements will relate to the latest co-operative year terminating on such date as may be fixed by the local governments. In the event, however, of any society not being sufficiently expert in accountancy to prepare in due time the returns from which statements for agricultural and non-agricultural societies are compiled, the registrar may utilize, for the purpose of preparing these statements, the latest available audited figures of the society concerned. If such societies are numerous,

the registrar can probably arrange to have them audited during the last quarter of the year under report, so as to minimise the inaccuracy caused by the fact that their returns are not for the same period as those of other societies.

Note. — There is no objection to primary societies submitting their statements to the central banks to which they are affiliated, and to the central banks compiling the annual statements from these returns and submitting them to the registrar, but this procedure should only be allowed in cases in which the registrar considers a central bank to be capable of doing the work.

Unions.

15. A special statement will be prepared for unions. The unions to be dealt with in the statement will be those which supervise or supervise and guarantee. unions which do banking business will be classed as central banks.

The statements prescribed are : —

A	— Operations of	Central Banks.
B	»	» Agricultural Societies.
C	»	» Non-Agricultural Societies.
D	»	» Unions.
E	»	» Insurance Societies.
F	»	» Central Re-insurance Societies.
G	Central Banks	— Receipts and Disbursements Statement.
H	»	» Balance Sheet.
I	»	» Profit and Loss Statement.
	»	» Quarterly Finance Statements.

FRANCE.

THE PART PLAYED BY CO-OPERATION IN RECONSTRUCTION WORK IN RURAL DISTRICTS. — Communicated by M. Dabat to *l'Académie d'Agriculture de France.* Session of 12 July 1916.

The flood of the Marne at the end of January 1910 destroyed a large number of houses and farm buildings at Juvigny, and in many communes bordering the river.

The local population were greatly discouraged by the disaster to their farms and fields, and many of them, demoralised by the misfortune, were inclined rather to leave the country than undertake the labour of restoration.

The aid afforded by the public authorities, together with the Department of Agricultural Improvements, and the devoted work of the mayor,

contributed to revive the courage of the sufferers, and opened up the possibility of their not only regaining all that they had lost, but even profiting by the disaster to make some improvements.

The Department of Agricultural Improvements took upon itself to demonstrate to those concerned :

(1) The advantages to be obtained by combining for reconstruction of their farm buildings, so that they might call in the aid of powerful contractors, and consequently re-erect the buildings with the utmost speed and least expense ;

(2) The desirability of adopting plans for reconstruction of farm buildings entailing the use of identical materials (facility of supply, wholesale purchase, reduction in cost of carriage) ;

(3) The possibility of obtaining advances for immediate rebuilding from the agricultural Credit Society.

A co-operative society was formed among the landowners for the purpose of re-erecting 43 farm buildings (14 barns, 13 stables or cowsheds, 10 dwellinghouses and 6 sheds).

Some co-operators placed the work of reconstruction of the whole of their buildings in the hands of the society, others part only of their buildings. It need hardly be said that joining the society was a perfectly optional matter. The richest landowners kept out of it, and it chiefly benefited those whose personal resources were smallest.

The payments of the members formed a fund of 50,000 francs, and to supplement this to the necessary extent, the society contracted a short-date loan of 100,000 francs from the local office of the Mutual Agricultural Credit Society of Châlons-sur-Marne. This loan gave the contractors the guarantee of actual cash resources totalling 150,000 francs so that the work could appeal to contractors or companies possessing the necessary organization to complete the rebuilding work with rapidity, and willing to offer considerable reductions.

The cost of scheme of work prepared by the Agricultural Improvements Department amounted to about 144,000 francs. It was decided that, in order of urgency, the rebuilding of barns should come first, the stables and cowsheds follow next, and lastly the dwelling houses.

The type adopted for the buildings was that in use locally, only altered in accordance with the requirements of modern agricultural science, both from the point of view of the building itself and the general working arrangements, particularly as regarded hygiene, ventilation, lighting etc.

The founders of the co-operative society convinced the members of the advantages of adopting these improvements, so that some objections which were made, particularly in reference to extension of buildings, were withdrawn.

The contractor to whom the work was allotted allowed a fair rebate on the estimate. With the additional work called for in the course of construction, the expenditure amounted to 160,000 francs for the 43 farm buildings according to the above particulars.

The undertakings entered into by the contractor were fulfilled ; the barns were completed by 30 June ready to receive the hay ; the stables by 15 August ; the dwelling houses, roofed on 31 August, were moved into on 1 November.

Such was the work of the Incorporated Farm Buildings Co-operative Society of Juvigny. Through it farmers possessing no financial facilities were able to obtain by combination all the advantages resulting from entrusting the aggregate work as a whole to one large concern. It was also the means of effecting considerable progress in the agricultural equipment of the commune.

The buildings, though constructed with every regard to economy, combine strength and comfort with a pleasing appearance. The general arrangements inside and out are in keeping with the most up-to-date requirements of agricultural science and practice, though not departing from local custom as settled by experience. They have since been taken as models for other buildings in that part of the country.

Thus, the havoc wrought by the catastrophe has been the means of calling into existence re-constructed, better organized and more productive farms. The co-operators have reason to be content with the results of their struggle, both against their misfortune and their prejudices against co-operation.

The excellent results obtained by the Co-operative Society of Juvigny demonstrate the benefits to be obtained by co-operative organization for remedying the disasters caused by the war. In the villages in the north and east where houses have been destroyed, it is thought that farmers will take example by Juvigny in the necessary work of reconstruction.

SHORT ANALYSES OF SEVERAL OF THE MOST RECENT WORKS ON CO-OPERATION AND ASSOCIATION.

DENMARK.

DESBONS (GEORGES). — Rural Co-operation in Denmark. Paris, *Les éditions juridiques*, 26, Boulevard de l'Hôpital, 1916.

M. Desbons is an apostle of co-operation. For him, as for a Danish agricultural worker, " co-operation is an article of faith " (p. 29) ; and the book which he has devoted to the co-operative agricultural societies of Denmark has frequently an oratorical tone which might easily make it a popular work. Having made this statement we must recognize that the author understands his subject completely and has given it its right setting. After giving some general facts as to the rural character of Denmark, M. Desbons examines the organization and the working of the different types of societies : co-operative credit societies, co-operative societies of consumers, co-operative societies of producers including co-operative dairies, co-operative slaughter-houses, co-operative societies for the export of eggs and breeding societies. The exposition of the difficulties which these societies have had to overcome is particularly instructive, as are the results obtained. The work ends with some forecasts, at once eloquent and determinedly optimistic.

As far as it is possible to discover M. Desbons' use of documentary sources has been abundant and thorough. On the other hand his statistical statements seem to be out of date. He depends, for instance, on a table shown at the Exhibition of 1900 for his description of the condition of credit societies, and declares that " since this date it has continued to be equally flourishing ". A mere examination of the *International Review of Agricultural Economics* would have enabled him to substitute the figures for 1915 for these which concern 1899. This lack of focus is the more regrettable because the progress made by credit societies of late years has increased. Thus M. Desbons says that today 1,450,000 pigs are killed in the Danish co-operative slaughterhouses. As a matter of fact 2,428,204 were killed in them in 1914.

An omission in the work is due to M. Desbons' failure to say anything of mutual agricultural insurance societies. They deserve a mention however for in Denmark they have flourished particularly. The following facts will give an idea of their importance : eight large mutual insurance societies

against fire in agricultural buildings covered in 1914-15 risks amounting to 1,013,847,484 $. In addition 89 societies for mutual insurance against fire in respect of risk to moveable property guarantee a capital of 951,956,368 $. The insurance of cattle and horses is undertaken by 1,050 mutual societies, which cover risks reaching the sum of 39,396,000 $. for horses and 12,998,000 $. for cattle. The number of insured horses reaches 312,000, that of insured cattle 258,000, to which we must add 20,000 insured pigs and 2,000 insured sheep.

The mutual insurance societies against hail number 15. They have 80,673 members and insure harvests valued at 53,158,068 $. Insurance against damage caused by storms is undertaken by 7 mutual societies comprising 86,235 members and covering risks valued at 151,778,400 $. Finally 8 mutual societies, comprising 213,600 members, undertake insurance against accidents.

It would be easy for M. Desbons to insert, in a second edition for which we hope, figures which would make his book a valuable instrument for work and propaganda.

Part II: Insurance and Thrift

GREAT BRITAIN AND IRELAND.

CO-OPERATIVE HORSE INSURANCE SOCIETIES.

SOURCE:

THE JOURNAL OF THE BOARD OF AGRICULTURE, April 1913; October 1914; December 1914; March 1915; June 1916.

So far as the Board of Agriculture have been able to ascertain, there are no co-operative societies for the insurance of horses in Wales, and only 15 in England, of which 6 are in Cambridgeshire. Five of them are registered under the Friendly Societies Act. Statistics have been obtained for 12 of the societies and show that, taken together, these societies had 755 members and insured 1,311 horses — an average per society of 63 members and 109 horses — less than 2 horses per member. Five of them insured cattle also, to the number of 680. The 12 societies had reserve funds aggregating £2,785. The oldest society, that at Soham in Cambridgeshire, founded in 1866, is also the largest, and, on the whole, the most successful. In 1913 it consisted of 180 members, insured 230 horses and 380 cattle, and had a reserve fund of £534. The number of these societies is so small, and the systems on which they work differ so much in detail, that it would be misleading to attempt to give general averages of their statistics, and a better idea of the working of co-operative horse insurance will be obtained by studying several of the societies separately.

§ 1. The Bedworth Co-operative Horse Insurance Society.

In 1896, a number of owners of horses at Bedworth and Longford, on the outskirts of Coventry, formed a co-operative society for the insurrance of their horses, which was in 1906 registered under the Friendly Societies Act. The object of the society is declared to be "to provide by voluntary subscriptions of the members, with the aid of donations, for insuring money to be paid on the death of a member's horse". At the end of 1912, the society consisted of 87 members and insured 109 horses, of which 98 were used mainly for hauling coals and other heavy weights, and 11 for light carting work by dairymen, bakers and butchers. The great majority of the horses insured are owned singly by men who make a living by driving coals from the pits to the houses of colliers and customers, some of the men being ex-colliers, disabled by accidents in the pits.

The horses are valued by a veterinary surgeon once a year, in the month of May, when for greater convenience they are collected in a field for his inspection. The value he puts upon them is accepted as the basis on which the premium for the following year is calculated, and as determining the amount to be paid by the society to the owner of any horse which may die within the year. Should any member fail to produce his horse for valuation at the annual inspection, he is required to take it, as soon as possible thereafter, to the veterinary surgeon and pay 2*s.* 6*d.* as the fee for a special valuation. The age and description of each horse are carefully recorded, together with its value, and no dispute has been known to occur, as regards either the identification of a horse or the amount payable on it.

The value placed in the year 1912 on the 109 horses came to a total of £2,564, which gives an average of nearly £24 per horse : 43 of the horses were valued at £20 or less, 35 at between £20 and £30, and 31 at over £30. The lowest value placed on any horse was £9, and the highest £42. Of the 95 horses which were valued both in the years 1911 and 1912, 55 showed no change in value, 6 were valued at a higher rate than before, the average increase in value being £4,10*s.*, and 34 were valued at a lower rate than in the previous year, the average decrease in value being £4,15*s.* No horse is accepted for insurance for the first time unless it is passed by the veterinary surgeon as of good market value and as not over 15 years of age, but a horse, once insured, may be kept by its owner on the books of the society until it is sold or dies. Of the 109 horses under insurance at the end of the year 1912, 48 were over 12 years of age. Whenever an insured horse falls ill or meets with an accident, the owner is bound to give immediate notice to the veterinary surgeon, who is under an engagement to attend with the least possible delay, either by day or by night. Members are required to let him know at once when signs of illness are noticed and not to rely on their own remedies ; but drenches for cases of colic, etc., are kept in readiness and used when necessary, pending his

arrival. Should the horse die or be condemned to be slaughtered, the society pays the owner three-fourths of the value put upon it at the last valuation. The carcass is at the disposal of the society, which has made a contract for an all-round payment of £1. 6*s*. per carcass.

When a member first enters a horse, he has to pay an entrance fee of 3*s*. 6 *d*., which covers not only that particular horse, but any other that may take its place. The insurance contributions are payable fortnightly and are charged at the rate of 1*d*. per week for every £5 or part of £5 at which the horse is valued, so that on a horse valued at the average rate of £24, the insurance contribution payable would be 5*d*. a week, that is £1. 1*s*. 8*d*. a year.

The society has made a contract with its veterinary surgeon, in accordance with which he not only values the horses, but attends them without any additional fee, and supplies them with medicine free of charge. The number of horses annually insured for the years 1907-1912 gives a total of 742. Of these 48 died or were slaughtered, so that the average annual death-rate was 6.5 per cent., the lowest death-rate in any year having been 4.3 per cent., and the highest 9.5 per cent. On these 48 horses the society paid £589, which gives an average of £12.6*s*. per horse that died; the largest amount paid on any horse was £24, and the smallest amount paid was £5.5 *s*.; so that, as might have been expected, the death-rate was much higher among the older and less valuable horses than among the younger and more valuable animals. The 16 horses on which claims had to be paid during the years 1911-1912 were all over 11 years of age; their average value was only £15, and the average amount paid on them by the society was £11.5*s*. There used to be no restriction as to the age at which a horse might be accepted for insurance, but now the society refuses to insure a horse known to be over 15 years of age, unless it is already insured, and the introduction of this restriction partly accounts for the marked decrease in the death-rate from 7.6 to 4 6 per cent. in 1912, and to the consequent large saving of £87 made in that year. The amount paid on claims during the six years 1907-1912 is equivalent to an average of 16*s*. per horse insured.

Separate accounts are kept of the insurance and the management funds, and the total amount charged to the insurance fund, including claims and veterinary surgeon's fees, was £764 for the six years. The income credited to this fund consisted of £766 realized as insurance contributions, which gives an average of almost exactly £1 per annum per horse insured, £17 from interest, and £12 from sale of carcasses, making the total income of the insurance fund £796. This would have left the insurance fund with a gain during the six years of £32, but during the last three years £60 has been transferred to this fund from the management fund account, so that, as it now stands, the insurance fund shows a gain on the six years of £92, having increased from £136 to £228.

The expenses charged to the management fund amounted for the six years to £116, of which £73 was paid in salaries, the principal item being £10 a year paid to the secretary; £8 was paid as rent for rooms for

meetings, and the remainder for printing, stationery, and miscellaneous charges. The cost of administration, apart from the veterinary surgeon's fee, thus averaged 3*s.* 2*d.* per horse insured. To meet these expenses the members paid a management contribution of 1*s.* per quarter per horse insured, the total income from this source being £117. There were also credited to this fund entrance fees, subscriptions of honorary members (about £24) and fines. The society is strict in exacting fines, not only for unpunctuality in payment of contributions, but for absence from the quarterly meetings, no excuse being accepted except that of ill-health. The total income of the management fund during the six years 1907-1912 amounted to £203, so that this fund showed a surplus during that period of £87 ; but, as already said, £60 has been transferred from the management fund to the insurance fund, and the accounts show the management fund as having increased from £45 to £72. Putting together the surpluses at the credit of the two funds, the society at the end of the year 1912 possessed altogether £300, which was deposited in the Savings Bank. This gross surplus had increased to that figure during the six years 1907-1912 from £181, so that, taken altogether, the society's finances are in a sound condition, and it possesses a reserve fund equal in itself to more than three times the average annual loss on claims of the six years 1907-1912.

The owner of a horse of the average value of £24, on which, if it dies he will receive £18 from the society, thus pays an insurance contribution of £1. 1*s.* 8*d.* per annum and a management contribution of 4*s.* per annum, making a total payment of £1. 5*s.* 8*d.* per annum, in return for which he not only has his horse insured, but obtains free of charge veterinary attendance and medicine in case his horse should fall ill. This privilege may be reckoned as an ample return for his management contribution, and the amount he actually pays for insurance risk may be taken as £1. 1*s.* 8*d.*, which comes to about 6 per cent. on £18, the amount he would receive if his horse were to die. On the average the insurance contribution comes to about 6.5 per cent. on the amount payable on the death of a horse.

This may be compared with the rates charged by live-stock insurance companies for the insurance of heavy-draught horses of the class to which most of the Bedworth horses belong. The usual rate charged on this class of horse by such companies is from 7 ½ to 10 per cent. on the amount payable in case of death, *plus* 3 per cent. to cover the risk of death from fire or lightning ; so that, while a member of the Bedworth society owning a horse worth £24, used for hauling coals, on which in the case of its death he would receive from the society £18, can insure it with the society on payment of an insurance premium of £1,1*s.* 8*d.* per annum, he would, if he insured it with an insurance company for a payment of £18, have to pay from £1. 7*s.* to £1. 17*s.* per annum. Moreover, these insurance companies generally charge a higher premium on any animal over ten years of age, and refuse to commence insuring horses over 12 or 13 years of age, whereas the Bedworth society insures horses at the same premium whatever their age be, and accepts new horses for insurance up to 15 years of

age. A member of the Bedworth Society also receives the advantages of veterinary medicine and attendance free for his horse, whenever it falls sick, on a payment to the society of 4*s*. a year, and his society holds savings amounting to £300, which offer him good security against the risk of having to pay a levy to make up for a possible deficiency in the insurance fund.

The society has been very successful and of great benefit to the small horse-owners of whom it is composed.

§ 2. The Newark Horsekeepers' Insurance Company.

In 1880 a number of horse-owners at Newark, in Nottinghamshire, founded an unregistered mutual insurance society on co-operative principles for the insurance of their horses. This society proved so successful that by 1898 it had accumulated a reserve fund of about £600. Some of the members then wished to divide up the fund, and in order to avoid this suicidal action, it was resolved to form the society into a limited liability company. No money was paid to the members, nor were they required to pay any money for their shares in the new company. The shares were allotted to the members of the old society in proportion to the amount each member had paid in insurance contributions during its existence. The company, which still resembles in some respects a co-operative society, was incorporated under the Companies Acts to carry on the business of insurance of horses, cattle, sheep, pigs and other animals against death, loss or damage from any cause whatsoever, and to provide veterinary medical attendance on the illness of any animal insured. Power was also taken to lend money to customers and others having dealings with the company on such terms as might seem expedient. The capital was declared to be £1,000, divided into 1,000 shares of £1 each, and the liability of members was limited. According to the articles of association a member has one vote for every share he holds, and the quorum of a general meeting is five. The number of directors is to be not less than three nor more than seven, and they are to receive as remuneration £10 a year (since raised to £21), to be divided among them as they shall determine. The term of office is three years and the directors retire by rotation and are eligible for re-election : a director must hold six shares in his own right. The profits of the company in each year are to be divided amongst the members in proportion to their shares and according to the amount paid up thereon, but so that no higher dividend than 6 per cent. shall be paid, except by way of making up a deficiency in the dividend for a previous year. The members have power, before recommending any dividend, to set aside out of the profits of the company such sums as they think proper as a reserve fund to meet contingencies, or for equalising dividends or other purposes, with power to divide the remaining profit by way of bonus to members ; all surplus income accruing after payment of dividends,

and bonus to policy holders is to be carried to the reserve fund. A member desiring to transfer his shares must first offer them to some other member and, failing a sale, he must offer them to the directors of the company. If the directors do not agree to purchase the shares within twenty-one days, he is at liberty to transfer the shares to any other person, but the directors may refuse to register a transfer to a transferee of whom they do not approve.

Re-valuing. — The horses insured are re-valued every year in December, and the amount of the valuation determines for the next twelve months the amount payable on any claim made regarding the horse. In the event of a claim being made good the company pays only to two-thirds of the market-value of the horse at the last valuation, and the rate of premium (which is payable quarterly on 25 March, June, September and December in each year) varies with the value then put on the horse. The rate charged is approximately $5\,^{5}/_{6}$ per cent. per annum on the market value of the horse, which is equivalent to $8\,^{3}/_{4}$ per cent. per annum on the amount claimable in case of death. Thus on a horse valued at £24, on which £16 is payable in case of death, the quarterly premium is 7*s.*, equivalent to £1.8*s.* per annum. In return for this premium the member not only has his horse insured for two-thirds of its market value, but is entitled to veterinary attendance and medicine from the company's veterinary surgeon and to veterinary expenses incurred with any other veterinary surgeon when the animal is taken ill in another district, and can also, when he purchases a horse, have an examination made by the company's veterinary surgeon at a fee of 5*s.* for each horse. He may also receive a bonus out of the profits of the company, when the directors are of opinion that the profits warrant such a course.

Claims. — Claims are payable in the event of accidental death or of an accident necessitating the immediate destruction of the insured animal, or in the event of its death from disease (glanders and farcy excepted) at any time from noon on the twenty-first day after acceptance of the proposal and payment of the premium, but no claim is payable if the animal dies outside the United Kingdom, or from neglect or improper use or unskilful treatment, or from improper loading of any vehicle to which it may be harnessed, or by reason of its being left unattended, or of the intoxication of the rider or driver, or from malicious or wilful injury; nor does the policy cover the risks of or arising from the effects of foaling or castration, except under special conditions. If the animal is covered by any other insurance the company contributes only its rateable proportion, so that the owner may not receive more than two-thirds of the market value.

Notice of Accident. — Notice of any accident to, or illness or death of the horse insured must be immediately given to the company at its registered office, and in case such notice is not given within twelve hours, or if the animal is destroyed without a written authority from the company's veterinary surgeon or secretary, all right of claim is forfeited. Notice must be immediately given to the company's veterinary surgeon.

Receipts and Expenditure. — On the average of the 12 years ending 1913 the working of the society was as follows. The average receipts were :

	£ s.
Premiums	196 10
Entry fees	1 6
Sale of carcasses	2 3
Interest	21 12
Miscellaneous	0 8
Total receipts	221 19

and the expenditure, other than expenditure on dividends and bonuses, averaged as follows :

	£ s.
Audit fee	2 2
Salaries	22 12
Veterinary surgeon's fee	56 1
Income tax	5 10
Paid on claims	43 18
Printing, postages, etc.	5 17
Directors' fees	18 5
Total expenditure	154 5

so that on the average the company made an annual profit on its working, available for dividend, bonus and reserve fund, of £67.14*s*. For the 12 years taken together the total profit amounted to £811.10*s*., which was disposed of as follows:

	£ s.
Dividend to shareholders	465 15
Bonuses to policy holders	275 11
Carried to reserve fund	70 4
Total	811 10

According to the balance sheet for the year 1913 the company then possessed assets amounting to £830, viz., cash, £222; investment, £600; loan to insurer, £8; against which the only liability was £647 due to shareholders, thus leaving a balance of profit up to date, after payment of dividend and bonus, of £183, of which £102 was classed as reserve and £81 as profit of the year. Of this amount £77,13*s*. has been paid as dividend to shareholders and the remainder carried to the reserve fund, which amounts to £106.

Share Capital. — The share capital consists of 647 £1 shares, all paid up. The shareholders have received an average of 6 per cent. of their share capital for the whole period of the 12 years ending 1913. The policy holders have received a bonus in 9 of the 12 years varying from 5 per cent. to 20 per cent. of the amount paid by them in premiums, so that their bonuses averaged for the whole period 11 per cent. of their premiums, and as they paid a premium of $5\ ^5/_6$ per cent. on the market value of their horses, the net premium actually paid by them, after allowing for the bonus, was $5\ ^1/_5$ per cent. of the market value, in return for which they not only received two-thirds of the market value of any horse that died, but also had the benefit of veterinary attendance on any insured horse that fell ill.

The average number of horses insured was 170, and the average number of horses on which claims had to be paid was 3.9 ; so that the average casualty rate per annum was 2.3 per cent.; in the best year, 1913, no death occurred ; and in the worst year 1912, the casualty rate was 5 per cent. The total number of losses in the 12 years was 47, and the total amount paid on claims was £526, 14*s.*, so that the average amount paid per claim was £11. 4*s.*, and as the amount payable is two-thirds of the market value it appears that the average market value of the horses that died was about £17. The worst year of the series, financially, was 1911, in which of 140 horses 6 died, requiring payment by the company of £93, or an average of about £15. 10*s.* per horse, so that the average market value of the horses that died in that year was about £23. This was the only year of the series in which the society's accounts showed a loss on the working of the year, amounting to £8. 5*s.*, and in that year neither bonus nor dividend was paid. For the whole period the amount paid on claims averaged £43. 18*s.* per annum, and as on the average 170 horses were insured, the compensation paid on claims by the company averaged only 5*s.* 2*d.* per annum per horse insured. For the disposal of the carcasses a contract has been made with a knacker, who pays £1. 10*s.* for a large carcass and £1. 5*s.* for a small one.

Veterinary Inspection. — The arrangement made with the veterinary surgeon is that the company pays him quarterly at the rate of 7 *s.* 6 *d.* a year for each horse insured. In return for this contract-fee he engages to give veterinary attendance and medicine free to every insured horse, a privilege highly valued by the insurers, who pay nothing extra for it, so that this amount may be considered to be a payment for veterinary services and deducted from the premiums they pay to the company to get the amount really paid for insurance. The company also gets from the veterinary surgeon in return for this contract-fee the following services, free of further charge : he examines and passes or rejects all horses presented for insurance ; keeps a list of them with their age, description and value ; takes part in the annual valuation ; and decides valuation disputes. The company owes much of its success and popularity to his skilled supervision of its interests on the veterinary side.

The valuation is made annually in December and takes effect for premiums and compensation from the 25th of that month. The area covered

by the company, which extends to a distance of about 8 miles from Newark, is divided among the veterinary surgeon and the directors, who go in pairs or threes, visit the horses on their owners' premises without notice, and after considering the value placed upon them at the last valuation, fix the value of each animal for the coming year. A number of the insured horses are worth £60 or more, but the owner is allowed to fix the amount for which he will insure his horse, so long as it does not exceed the value put upon it by the valuing committee, and as a matter of fact no horse is insured at a higher amount than £45. The reasons given for this tendency on the part of the owners of the better horses are that they are content, by payment of a lower premium, to secure free veterinary attendance for the insured horse together with the prospect of receiving a substantial fraction of its value in case of death, and that they do not wish to risk wrecking the society by making heavy claims upon its funds. At the other end of the scale, horses are not admitted to insurance unless they are worth at least £15, and as a horse gets old its value is not written down below £12, so that in any case, however old a horse, once it is insured its owner will receive at least £8 if it dies in his hands. Statistics are available for 109 of the insured horses, of which 31 were valued for insurance in December 1913 at £15 or less, 15 at over £15 and not over £20, 55 at over £20 and not over £30, and only 8 at more than £30. The average value for insurance of the 109 horses was £23, but their real value would be somewhat higher.

There is no definite rule as to the age above which a new horse will not be accepted for insurance, but unless it belongs to a man who already insures with the company, a horse over 15 years of age is rejected. Once insured a horse is never struck off the list owing to old age. Of the 109 horses for which statistics are available, the youngest is 3 and the oldest 29 years old : 38 are over 12, and of these 8 are over 20 years old.

Of these 109 horses 48 are employed in heavy work such as carting coals, building materials, flour, etc., and 61 in light work such as that of butchers, bakers, milk dealers, fishmongers, grocers, cab drivers, etc. No difference is made in the premium whatever be the kind of work for which the horse is used. Very few ordinary farm horses are insured, and the company is rather a town and village society than an agricultural society. In 1913 the number of policy holders was 69 and the number of horses insured was 134, an average of 2 per insurer. One policy holder has as many as 7 horses insured with the company, but most have only 1 or 2. In 1902 there were 109 policy holders who insured 198 horses, but since then there has been a fairly steady decline, which is ascribed to greater strictness in taking in doubtful horses, none being accepted unless " serviceably sound ", and to a feeling among the owners of the more valuable horses, especially those who own a number, that it pays them better to take the risk themselves than to pay the premiums required by the company.

There is no rule under which a new insurer can demand a share in the company, and a number of the policy holders hold no share and therefore have no voice in the management. The articles of association fix the

capital at 1,000 shares of £1 each, but in recent years there has been no increase in the number of shares issued, which stands at 647. As the shares have paid 6 per cent. for a number of years they are in demand and sell at a premium, one lot having changed hands at £1.1*s.* 6*d.* The directors refuse to allow shares to be sold to outsiders, so that there is a tendency to concentrate them in few hands, but in 1905 there were 81 shareholders, of whom 19 owned 1 share each and several 3 or 4. There are 7 directors, all living in the town, their occupations being coal merchant, butcher, grocer, baker, carter, cab owner and furniture dealer.

Results. — From the point of view of the shareholders the company has been successful. The original shareholders obtained their shares free of payment, in return for the savings they had accumulated by the previous good management of their co-operative insurance society. Their shares have paid them 6 per cent. per annum and sell at a premium. They are liable for any exceptional loss due to excessive mortality, but against this risk they have a reserve fund of £106 — equal to more than two years' losses on claims — and the average death rate among the insured horses for the 12 years 1902-1913 has been only 2.3 per cent. per annum. The two disquieting features are the high costs of management and the falling off in the number of horses insured. Apart from the 7*s.* 6*d.* per horse paid for veterinary services, the costs of management have averaged, as follows, for the 12 years: audit fee, £2,2*s.*; salaries, £22,12*s.*; printing, postage etc., £5,17*s.*; directors' fees, £18,5*s.*; total £48,16*s.* This is more than the amount paid on claims, which averaged only £43.0*s.*18*d.* and is equivalent to an average of 5*s.* 9*d.* per annum per horse insured; whereas in the Bedworth Co-operative Insurance Society, which is run on co-operative lines, the cost of management averages 3*s.* 2*d.* per annum per horse insured, and in the registered co-operative cow insurance societies in England and Wales, the cost of management averages only 6*d.* per annum per animal insured.

If the company could reduce its costs of management, it would have a still larger profit to show in its annual accounts, and although it could not increase the dividend paid to shareholders above 6 per cent., it would be in a position to pay a larger bonus to its policy holders and thus increase its usefulness to its neighbours on co-operative principles. A further step in the same direction might be made if the shareholders were to agree to reduce the capital of £647 to half that amount by taking payment from the company of half each share at 10*s.* per share and thus reducing the interest charge, which averages £38.16*s.* per annum, to half that amount. It might also require each policy holder to take out at least one share, and permit him to acquire up to five shares at £1 until the full number of 1,000 shares has been issued. This would broaden the basis of the company and lessen the inducement to sacrifice the interests of the insurers to those of the shareholders. But until the company gave equal votes to all the shareholders, irrespective of the number of shares held by each, it could not be considered to be truly co-operative.

To the insurer, say the man owning a horse worth £24 used for heavy

carting work, on which he would receive from the company £16 in case of its death from disease or accident, the existence of this company must have been a great advantage. He pays altogether to the company $5\,^{5}/_{6}$ per cent. per annum on the market value, *i. e.*, £1,8*s.* per annum, but on the average of the 12 years 1902-1913 he has received 11 per cent. on his premiums as bonuses, so that his net payment has averaged £1 5*s.* or $5\,^{1}/_{5}$ per cent. on the market-value of his horse. In return for this payment he not only has his horse insured but is entitled to veterinary attendance and medicine free of charge. This latter privilege costs the company 7*s.* 6*d.* per horse, so the amount the insurer pays for insurance may be taken as 17*s.* 6*d.* per annum, equal to about $3\,^{2}/_{3}$ per cent. on the market-value of the horse, or nearly 5 ½ per cent. on the amount payable in case of death. If he had insured his horse with a large live stock insurance company he would have paid for a horse of that class, not more than 10 years old, $8\,^{3}/_{4}$ per cent. (some companies charge 10 per cent.), on the amount payable in case of death, *i. e.*, £1 8*s.* for £16, as against the 17*s.* 6*d.* he has paid to the Newark Company. The chief advantage to a man of this class, however, is that, while he would have found it practically impossible to get a distant company to take for insurance a horse not already insured over 12 years of age, and would have found the rate charged on his horse as it grew old prohibitive, he can have his horse, if serviceably sound, insured with the local company for the first time up to 15 years of age, and once it has been accepted for insurance can keep it insured at the same rate of premium up to any age, and will get from the company two-thirds of its value and not less than £8, however small its value be, whenever it dies on his hands. This is mainly due to the comparatively small area covered by the company's operations, which makes close supervision and fair valuation possible and practically obviates all risk of fraud.

It is interesting to compare the Newark Company's experience with that of the Bedworth Horse Insurance Society, which is run on purely co-operative lines. At Bedworth a member insuring a horse used for heavy draught work worth £24 for £18 payable in case of death (the Bedworth Society pays three-fourths of the market value while the Newark Company pays only two-thirds) pays in insurance contribution £1 1*s.* 8*d.* per annum, equal to 6 per cent. on the amount payable in case of death, as compared with the 5 ½ per cent. an insurer pays at Newark. But the Bedworth member pays in addition to this insurance contribution only 4*s.* per annum for management expenses per horse insured so that his total annual payment for a £24 horse is £1 5*s.* 8*d.*, in return for which he gets veterinary attendance and medicine free; while the Newark insurer pays altogether for a £24 horse £1 5*s.* per annum, including the cost of similar veterinary attendance; the Bedworth insurer however gets £18 on the death of his horse, while the Newark insurer gets only £16. The comparison would be much more favourable to Bedworth were it not that the average death rate among insured horses is 6 ½ per cent. there, while at Newark it is only 2.3 per cent. The reasons for this much heavier mortality

at Bedworth seem to be (1) that the Bedworth horses are used for more wearing work, 98 out of 109 insured being employed in hauling coals and other heavy weights, while only 48 out of 109 are so employed at Newark; and (2) that the Bedworth horses are, on the whole, older, 48 out of 109 being over 12 years of age, while only 38 out of 109 are over that age at Newark. Now that the Bedworth Society has resolved not to admit any horse over 15 years of age to insurance for the first time, its death rate has already fallen and its reserve fund is mounting up satisfactorily; and there seems reason to hope that the average death rate may soon be lowered so much that the society, having accumulated a substantial reserve fund, will be in a position to reduce the rate of premium charged to its old members. In one respect the Bedworth insurer is in a less favourable position than the Newark insurer who is not a shareholder. The latter is not liable to any levy, while the Bedworth member may be called upon to pay a levy to meet exceptional losses if the reserve fund becomes exhausted; but seeing that his society has already accumulated a reserve of £300, equal to three times its average annual losses, he is unlikely to be called upon to pay any levy.

If the Newark horse owners, instead of forming themselves into a limited liability company 14 years ago, had continued as a co-operative insurance society, giving to the insurers themselves all the benefit of any profits they might make, and paying no dividend to shareholders, and if they had, like the Bedworth Society, kept down the costs of management to 3*s.* 2*d.* per horse per annum, their average account would have stood as follows for the 12 years 1902-1913:

Average receipts per annum: —

Premiums	£196 10	
Entry fees	1 6	
Sale of carcasses	2 3	
Interest	21 12	
Miscellaneous	0 8	
Total receipts		£221 19

Average expenditure per annum: —

Paid on claims	£43 18	
Veterinary surgeon's fee	56 1	
Management expenses	26 18	
Total expenditure		£126 17
Average surplus per annum		£95 2

In that case, while retaining their reserve fund at the £600 they had already accumulated, they might have distributed the whole of this surplus in bonuses to the insuring members, or in other words have reduced their premium payments by an average of about 11*s.* per horse, so that the member insuring on co-operative principles a horse worth £24 (even one employed on heavy draught work) would have had his horse insured for £16 and attended to by a veterinary surgeon free of charge on a total payment of about 17*s.* a year instead of the £1 5*s.* he has actually paid, after allowing for the bonuses he has received. Such would have been the advantage to those insurers who are not shareholders of co-operative management, combined with the low death rate actually attained. Deducting the 7*s.* 6*d.* per horse charged for veterinary services the net amount paid by an owner for insurance proper would have been about 9*s.* 6*d.* per annum, or less than 3 per cent. on the £16 payable in case of the death of his horse, against the 8 $^{3}/_{4}$ or 10 per cent., *i. e.*, £1 8*s.* or £1 12*s.* he would have had to pay for a similar insurance to an ordinary live stock insurance company.

§ 3. The Soham Cattle Club.

Formation of the Club. — The Soham Cattle Club (1) was formed in 1866 and registered as a cattle insurance society under the Friendly Societies Act in 1875. It was established " for the purpose of making good any loss that the members may sustain by the death of cattle as stock ". It insures horses, mares, foals, and young horses ; and cows, calves, bullocks and young stock. A member must be elected by a majority of the members present at a meeting of the Club, and must pay 2*s.* 6*d.* as entrance money and 4*d.* per quarter for expenses of management. The society is managed by a committee consisting of two stewards, a secretary, a treasurer and two other members, who are elected annually. It meets every quarter and the contributions of members are payable at the quarterly meetings.

The society consists of about 180 members, almost all of whom are small holders, commoners or labourers, more than 100 of them having land which they cultivate. The committee includes three small holders, one of whom is a tenant of the County Council, a butcher, and a builder ; the secretary and the two stewards are small holders. The operations of the society are confined to the parish of Soham, the furthest point of which is about five miles from the village.

Rules of the Club. — A member wishing to insure an animal must inform the stewards, who examine and pass it, and no animal can be entered

(1) Soham is the largest village in Cambridgeshire.

which is diseased, crippled, or aged. All the insured animals are valued twice a year, in April and October, and the value that is placed upon each animal by the valuers determines, with effect from the next club night, the amount of insurance contribution, to be paid by the owner, and the amount to be paid him by the Club in case the animal should die within the following half year, the amount payable in case of death being seven-eighths of the value of the animal, *i. e.*, at the rate of 17*s.* 6*d.* in the £. At the half-yearly valuation the two stewards and the secretary go round and inspect the animals on their owners' premises, receiving £2 10*s.* to pay the expenses of their inspection tour. Any member may also have an animal valued and insured at any time by paying 6*d.* to the stewards and a full quarter's insurance contribution. A steward is paid 1*s.* from the funds each time he has to inspect a sick animal.

Both cattle and horses are accepted for insurance if over a fortnight old, and there is no age fixed above which an animal will be rejected merely on account of old age. A horse of even 20 years of age is accepted if fit for work, and no animal once insured is deprived of insurance merely on the ground of old age. Cows are not accepted for insurance for the first time within six weeks of calving, nor are mares within eight weeks of foaling.

An important provision is that no horse can be valued for insurance purposes at over £35 and no cow at over £15, so that the valuation put on the animals is in many cases less than their true market value. Some of the insured horses are worth £50 or £60, and some of the insured cows are worth £23 or £24.

When any member finds one of his insured animals ill, he must inform the stewards, who inspect it, and if they think it advisable, order it to be killed, the skin and carcass being sold and the proceeds credited to the society; but no horses or cattle are slaughtered "simply from old age, or if condemned as unfit for work, which are otherwise in good health." No compensation is payable if the death of the animal is due to the wilful neglect of the owner, and no claim is payable "unless the stewards dispose of the carcass alive or dead".

The rules provide that in case any losses should occur and there should not be funds enough to meet the demands on the society, the members shall pay an extra subscription of any sum in the £ sufficient to pay such loss, as occasion may require. They also provide that the reserve fund shall be £600, and that if the funds fall below this amount extra subscriptions of any sum in the £ sufficient to raise it to this amount shall be paid. Thus the rate of insurance contribution varies according to the state of the funds. It is also sometimes made to vary according as the animals are kept on high land or on fen land, a higher rate being charged on the fen animals, because of their greater liability to disease and accident than in the case of animals kept on high land. In the Fens there are a number of open drains in which animals, especially horses, are apt to be drowned and as the air is damp and often foggy, animals kept in the Fens are more

liable to lung-trouble and other diseases, so that altogether the casualty rate is generally higher on the low than on the high ground.

Statistics of Animals Insured. — Statistics are available for 316 of the insured cattle. Of these 74 are cows, 105 heifers, 68 " buds " (stirks) and 69 calves : 111 of them are valued for insurance at the maximum of £15 and 205 at under that figure. The value for insurance of the whole number old and young, is £3,290, and their average value £10 8*s*. Similarly 236 of the insured horses comprise 68 mares, 45 fillies, 17 geldings, 22 nags, 39 ponies, 18 colts, 6 yearlings and 21 foals. Of these 68 are valued at £30 or over ; 53 at £20 and under £30, and 115 at under £20. Their total value is £4,928 and their average all-round value is £21. Except the nags and ponies, which are chiefly owned by trades-people and used for light road-work, practically all the adult animals are used for ordinary farm-work. No difference is made in the premium with reference to the class of work on which an animal is employed, and no extra charge is made to cover calving or foaling risks.

In July 1914, the number of animals insured was 316 cattle and 273 horses, an average of 1.8 cattle and 1.5 horses per member, and as a member must insure all his stock, this shows that most of the members have only a small number of animals each. Members who have no stock are allowed to continue as members on paying 6*d*. per quarter to the management fund.

During the eleven years ending 1913 the number of members rose from 125 to 180, the number of cattle insured from 260 to 380 and the number of horses insured from 172 to 230. The total amount paid on claims averaged £186, and the total expenditure of the insurance fund averaged £188, annually. On the other hand the average income of the insurance fund was as follows :

	£
Insurance contributions.	137
Fines	1
Interest	16
Sale of carcasses.	11
Other income.	2
Total income . . .	£167

The net average loss on the working of the insurance fund during the 11 years has therefore been £21 per annum, and the amount at the credit of the insurance fund has fallen in that period from £770 to £534.

The cost of management has averaged £12,4*s*. per annum, or less than 6*d*. per animal insured, and has been met almost entirely by the contribution for management expenses of 1*s*. 4*d*. per annum per member. Of the £12,3*s*. spent in 1913 the stewards received £5,15*s*., and the secretary, assistant-secretary and treasurer £3. The balance sheet for 1912 shows

that the total assets of the society were £534, of which £404 was deposited in the Post Office Savings Bank.

From 1890 to 1900 the contributions from members were at the rate of 1 ½ *d.* in the £ per quarter on all the horses and cattle insured, and the amount at credit of the insurance fund rose from £430 to £775. The society then in 1900 reduced the rate all-round to 1*d.* per £ per quarter, and even at this rate the balance continued to rise until in 1906 it was £813. Then followed two bad years, partly owing to an epidemic, and the funds fell to £630. An enquiry made by the society showed that during the last 4 ¼ years the contributions levied on the stock kept in the high land had amounted to £399 against a loss of £357, while for the stock kept in the fen land the contributions had been £142 and the losses £359. As this showed conclusively that the mortality had occurred chiefly among the fen stock, an extra ½*d.* per £ per quarter was charged on animals kept in the Fens. Notwithstanding this the funds had again fallen to £534 at the end of 1913, and as this is below the £600 aimed at by the rules, all insured stock, wherever kept, are now charged at the rate of 1 ½*d.* per £ per quarter. In the valuation, each animal is valued in even pounds, so that it is easy for a member to calculate for himself what his quarterly payment will be. The rate of 1 ½*d.* in the £ per quarter is equivalent to 6*d.* in the £ per annum, *i. e.*, 2 ½ per cent. per annum on the value placed on the animal at valuation, and, as the amount payable on the death of an animal is seven-eighths of its valuation, this rate of premium equals just under 3 per cent. per annum on the amount payable in case of death. When the rate of insurance contribution was 1*d.* per £ per quarter, it equalled 1 $^{2}/_{3}$ per cent. per annum on the value placed on the animal, or just under 2 per cent. per annum on the amount payable in case of death.

Taking cattle and horses together, on the average of the eleven years, of 541 animals insured 17.2 died — an average death-rate of 3.2 per cent. per annum. The average amount paid on claims was £186, but £11 was received for carcasses, so that the net annual loss to the Club was £175, equivalent to £10 per animal that died, and to 6*s.* 6*d.* per animal insured.

For cattle the average amount paid per claim was £7,8*s.*, while for horses it was £14 4*s.* Spread over the number of animals insured the amount paid on claims equalled for cattle 4*s.* 2*d.* per animal, and for horses 11*s.* 5*d.* The amount of premiums received averaged £137, or 5*s.* 1*d.* per animal insured, so that although the Club received an average of £16 in interest on its reserve fund, its expenditure exceeded its income, and, as already said, it had to draw on the reserve fund at the average rate of £21 per annum. In 1913, at the enhanced rate of 1 ½ *d.* per £ per quarter applied to all animals, the average amount of premium received for animals insured was 7*s.* 2*s.*, and as this exceeds the average net loss per animal insured for the last eleven years, it may reasonably be expected that the reserve fund will now mount up again.

It is interesting to compare the experience as regards cattle and horses separately. On the average of the eleven years, of 335 cattle 8.9 died,

an average death-rate of 2.7 per cent., while of 206 horses 8.3 died, an average death-rate of 4 per cent. Further, if we compare the experience of the first four years during which the reserve fund rose to £813, with that of the last seven, during which it fell to £534, we find that for the first period the death-rate among cattle was 2.7 per cent. per annum, and in the second period again 2.7, while on the other hand the death-rate among horses rose from 3.1 in the first period to 4.4 in the second. It is obvious, therefore, that the main reason why the reserve fund has decreased in the last seven years has been that there has been a higher mortality among the horses. It is also clear that if the insurance contribution for a cow is 2 ½ per cent. per annum (*i. e.*, 1 ½*d.* per £ per quarter) on her value for insurance, that paid for a horse should, according to the recent mortality experience, be about 4 per cent. per annum on his value for insurance, *i. e.*, 2 ½*d.* per £ per quarter. If the Club were to raise the charge on horses to this amount, the distribution of the total insurance charges would be fairer ; the reserve fund might be expected to increase above the £ 600 aimed at (which is probably sufficient, as it exceeds three times the average annual net loss on claims), and the Club might then safely give a reduction on the animals kept on the high land, among which the death-rate is lower then it is on the fen land. It might at least raise the rate to 2 ½*d.* per £ per quarter on horses kept in the Fens, as being the class of animal most responsible for the recent rise in the death-rate and consequent depletion of the reserve.

The fact remains that this society of small holders, entirely dependent on its own resources and management, has for many years insured its members' cattle and horses from death by disease and accident from a fortnight old up to any age, on payment of an insurance contribution never exceeding 3 per cent. per annum on the amount payable in case of death and of a management contribution of 1*s.* 4*d.* per member per annum (equivalent to less than 6*d.* per animal insured) ; while, if the members had individually insured their animals with an ordinary live stock insurance company, they would have had to pay as premium at least 7 ½ per cent. on their dairy cows and 5 per cent. (for animals owned singly) on their farm-horses in the prime of life, while the rates charged on the very young or very old animals, now insured by the Club, would have been prohibitive and an extra charge would have been made to cover foaling risks. Meanwhile the Club has accumulated a reserve fund, which now amounts to £534. It thus affords an excellent example of the success of the co-operative insurance of live stock, worked by the small stock-owners themselves.

(*to be continued*).

MISCELLANEOUS INFORMATION AS TO INSURANCE AND THRIFT IN SEVERAL COUNTRIES.

GERMANY.

GERMAN INSURANCE SOCIETIES AGAINST HAIL IN 1915. — *Allgemeine Versicherungs presse* nº 19. Berlin, 7 May 1916.

Last year the German insurance societies were able to realize a profit of 7,999,975 marks on the premiums paid up. Such a result is rare. The distinct rise in the price of articles of food has had the consequence of increasing the sums insured, while the payment of premiums has lessened by 7.4 millions.

During the years 1871-1904 the sum of the indemnities paid for accidents surpassed 1 % of the insured values only six times, namely in the years 1872 (1.10), 1873 (1.02), 1880 (1.58), 1884 (1.23), 1885 (1.06), 1891 (1.27). Since 1905 however the amount of indemnities paid has varied from year to year in relation to the insured values, as indicated by the following figures: 1.50, 1.35, 1.29, 1.66, 0.59, 1.48, 0.66, 1.02, 0.70, 0.93, and 0.59 % for the year under review.

The course of business in 1915 showed an increase in insured value represented by 404 million marks. Of all the establishments for mutual insurance only two were obliged to deduct supplementary contributions. These reached a total of 527,267 marks as against 4.5 millions in the preceding year. Receipts under the head of premiums and contributions are consequently represented by the figures 39.95 million marks against 33.7 million in 1914, a greatly improved result.

The five joint stock companies which in the 28 financial years from 1877 to 1904 realized a net profit of 13,308,553 marks, suffered from 1905 to 1910 a loss of 8,526,988 marks; and then the five succeeding years brought them an excess of 21.6 millions marks.

The following table shows the manner in which these fluctuations were shared by the different joint stock insurance companies.

	1915	1911-14	1905-10	1877-1904
Berliner.	904,204	3,251,059	491,855	1,444,837
Vaterländische. . . .	—	—	413,339	174,999
Kölnische.	1,465,771	4,223,090	3,364,155	3,844,071
Magdeburg.	1,490,552	4,225,513	4,274,495	3,019,068
Union.	1,523,977	4,537,400	964,954	5,175,576
	5,384,504	16,237,062	8,527,088	13,308,553

From these figures it appears that, thanks to the course of business last year, the average annual result which the joint stock companies have obtained during a period of 39 years is 677,000 marks, for an annual aggregate of risks of a thousand million marks.

The receipts and the expenditure in 1915 can be shown as follows :

	13 Mutual Societies & Bavarian Societies	4 Joint-Stock Societies
Premiums paid up and contributions.	27,461,483	12,492,392
To be deducted thence :		
Re-insurance premiums	245,703	1,328,678
Increase of the reserves of the premiums	69,716	93
Balance :		
Net paid up premiums	27,146,064	11,163,621
Of this sum there has been spent :		
On indemnities	20,258,786	3,549,474
On costs and taxes	4,271,807	2,229,643
Balance of paid up premiums	2,615,471	5,384,504
To add to this :		
Interest	652,084	1,033,133
Differences in the currencies	87,175	737,661
Total excess.	3,180,370	5,879,976

The value insured reached in 1915 4,080,666,116 marks. The average percentage of the premiums was about 0.98 % as against 1.21 % in the preceding year.

The following are the results obtained by the German societies for insurance against hail since 1871 :

Years	Number of Societies	Insured Value	Premium paid up including supplementary contributions to mutual societies	Expenditure on indemnities paid by the Societies on their own accounts	Premiums	Accidents
					in terms of percentage of insured value	
1871–5	21	5,877,586,000	61,889,000	52,924,000	1.05	0.90
1876–80	23	6,890,971,000	63,704,000	53,604,000	0.93	0.78
1881–5	22	8,571,958,900	89,007,000	76,964,000	1.05	0.90
1886–90	24	9,271,351,000	90,988,000	64,719,000	0.98	0.70
1891–95	24	11,297,301,000	110,836,000	78,535,000	0.98	0.70
1896–1900	23	12,761,526,000	130,915,000	107,345,000	1.03	0.84
1901–05	19	13,748,810,000	156,274,000	130,749,000	1.14	0.95
1906–10	18	15,507,801,000	230,853,000	198,548,000	1.50	1.28
1871–1915	18	101,890,486,000	1,144,799,000	902,426,000	1.13	0.89

The large German establishments for insurance against hail have received, in the course of the last 45 years, 1,144,8 million marks in paid up premiums, a sum out of which 902,426,000 marks, or 78.9 %, has been paid in indemnities for accidents. Admitting that costs have averaged as much as 20 % it becomes clear that in the stated period of time insurance against hail has brought very little profit to these establishments.

The total reserve funds of the 4 joint stock companies comprised at the end of 1915 22.9 million marks, a sum to which 17,847,000 marks must be added for unpaid preference shares. Of this sum 15.5 million marks comes under the head of extraordinary reserve. The payments in specie of the shareholders reached 7.4 million marks. The Bavarian Institute had at its disposal, at the end of 1915, a sum of 18 ¼ million marks, and the 13 establishments for mutual insurance a round sum of 18.7 million marks.

FRANCE.

THE POITOU SOCIETY FOR MUTUAL INSURANCE AGAINST THE RISKS OF AGRICULTURAL LABOUR. — Comunicated by M. Labergie to the Academy of Agriculture of France at the session of 26 July 1916.

The Mutual Agricultural Insurance Society of Poitou, founded in December 1908, aims at the protection of agriculturists against the risks afforded by the accidents of agricultural labour.

This society has made progress in truly exceptional conditions which can be deduced from the following figures.

Year	Members	Assessments	Claims for Accidents met
1909.	372	10,557 fr.	1,408 fr.
1910.	1,116	33,406 »	6,804 »
1911.	1,891	56,236 »	18,464 »
1912.	3,191	92,595 »	31,075 »
1913.	4,687	131,951 »	56,244 »
1914.	4,991	152,810 »	44,717 »
1915.	4,943	148,383 »	54,933 »

The check to progress received in 1914 is due to the fact that the war broke out at the very time of year at which the greatest influx of new members to the society habitually took place.

The slightness of the diminution in assessments in 1915 (4,400) is noticeable and is a proof of the loyalty of the members. The cancellations and suspensions of payment due to the events of the war have not surpassed 12,700 francs, a sum partially counterbalanced, to the amount of 8,000 francs, by the accession of new members.

If we examine not the assessments paid but the claims for accidents which have been met, we are pleasantly impressed by the diminution in the number of accidents in 1914 and 1915. In spite of the less skilled labour employed very few accidents — and those not serious — have been attendant on work.

To the accidents officially recognized, for which claims have been met, all those many accidents must be added which have not the strictly agricultural character provided for by the society's rules, and in respect of which the administrative council of the society has nevertheless taken action and granted aid. The Mutual Agricultural Insurance Society of Poitou, being independent and unhampered in its activities, has been true to its character as a really mutual aid society, by coming to the rescue of such of its members as have met with accidents outside its statutory classifications; and has moreover, analogously, been able to help those of its servants who have been the victims of grave and unforeseen events. Since the outbreak of war the society has been able to grant considerable allowances to the families of these servants, almost all of whom have been mobilised.

In spite of this very generous interpretation of its mission the society has succeeded in accumulating a reserve fund which protects it against all possibility of serious eventualities yet to come, and which will allow it to make deposit of those securities which will be required in the near future by an anticipated law as to agricultural accidents.

In the rules the founders inserted the principle that every five years a sum should be returned to the members, to be deducted from the excess of receipts over expenses after contributions had been made to all the reserve funds, which are very amply provided.

In the fifth year after the foundation of the society it was possible to fix the amount of this sum at 10,000 francs.

But the spirit of mutual aid which inspires the members of the society here again found expression, and the general meeting decided unanimously not to distribute this sum in order that, in view of the tragic circumstances of the country, it might form the beginning of an exceptional reserve for case of need.

The first tariffs were fixed after scrupulously careful study, and the results obtained during the first four years produced in them few pertinent modifications. They are resumed in the subjoined table :

Tariffs at the Time of Foundation	Francs
Arable land.	1.00
Vines.	1.30
Natural meadow land.	0.30
Moors, heaths, furze-covered land, ponds.	0.10
Horticulture, kitchen gardens.	7.50
Meadows, orchards.	0.50
Woods, cultivated copses.	0.15

Actual Tariffs	Francs
Arable land and artificial meadow-land. . . .	0.80
Vines (where they are accessory product) . . .	1.50
Natural meadow-land, fallow land, stubble land out of cultivation	0.40
Moors, heath, furze-covered land, fir woods, uncultivated ponds, woods, copses. . . .	0.20
Horticulture, kitchen gardens, vines (where vines are cultivated exclusively), woods, forests, nurseries, cultivated ponds, meadows, orchards	Tariffs vary with kind.

The variability of the conditions of cultivating gardens, vines where they are a sole product, cultivated ponds and so forth, has obliged the administrative council to reserve to itself the right to examine all propositions which regard properties of this class ; and this has been particularly necessary because of the extension of the society's sphere of action. It has therefore seemed best to remove these categories from the table of tariffs made in advance.

It is noticeable that the society's greatest supporter, arable land and artificial meadow land, has suffered a fall in its insurance tariff, while it has been necessary slightly to raise the rate charged on natural meadow-land, fallow land and land out of cultivation, which exist extensively in Poitou.

Some, although rare, modifications have also been necessary in the initiatory tariffs with regard to the exceptional insurance of animals for breeding (jackasses, boar-pigs, stallions, bulls etc.). Insurances against accidents, to which persons not exclusively and permanently employed in agricultural labour might be subject, have had to be similarly modified.

At the time of the outbreak of war the society had inaugurated the insurance of farms employing mechanical motive power, but this branch of the work is, owing to existing circumstances, provisionally abeyant.

At its outset the society arranged to insure proprietors who were not themselves cultivators against civil liability. The development of this class of insurance has ministered greatly to final success, for the *métayers* and farmers at once became anxious to follow the example of their landlords by insuring themselves.

Finally the usual class of insurances affecting agricultural labour was importantly extended by the introduction of insurances against accidents incidental to work undertaken for neighbours and friends, by casual and impermament agreement, whether paid or unpaid.

The customs of Poitou make these exchanges of labour particularly frequent, notably for the work of mowing, harvest, threshing, vintage and so forth.

The established tariffs vary when, whether through persons insured by the society or others, occasion arises — according to whether the work

done implies the employment of simple machinery or machines moved by motor, and so forth. This branch of insurance has been much extended.

The society's prosperity has been largely secured by the care with which its directing staff has been recruited: all the members of the administrative council are themselves agriculturists. The zeal of the society's agents is maintained by a controlling and inspecting service, and also by the encouragement and the aid which are very generously given in every deserving case, to insured persons as to the agents, even outside the cases strictly contemplated by the society's rules.

The one black spot, which diminishes the returns members might expect, is the abuse of which some doctors and chemists are guilty, in that they often take advantage of their situation in order to make exaggerated demands for payments. Happily the professional combinations are animated by a very different spirit and have steadily helped the society to triumph over a certain antagonism to the idea of mutual aid which, when all has been said, has been encountered only rarely.

Let us conclude by emphasizing the fact that the Mutual Society of Poitou is the first organization for mutual aid, dealing with the accidents of agricultural labour, which has arisen in France. It has been entirely the work of private initiative.

SWITZERLAND.

AUTHORITATIVE INTERPRETATION OF ARTICLES 37 AND 22 OF THE FEDERAL LAW OF 13 JUNE 1911 ON SICKNESS AND ACCIDENT INSURANCE.

This Review has already dealt with the Federal law of 13 June 1916 on accidents and sickness insurance in Switzerland (in the issue for April 1915) when speaking of the establishment of rural sickness funds and the application of article 37 of the Federal Law containing the provisions by virtue of which the Confederation assists the sickness funds in sparsely populated mountain regions. We also referred to this article recently in the issue for June of this year, when dealing with the "Accident and Sickness Insurance Information Office" established by the Swiss Peasants' Union.

On this matter, with particular reference to article 37 and also article 22 of the same Federal Law of the 13th June 1911, which deals with the medical and chemists' tariffs, the Federal Council, in its sittings of the 30th June and 4th July 1916, issued decrees regulating the authoritative construction to be put on the said articles.

The questions of principle solved by the Federal Council are three, namely :

1) By virtue of article 27 1st paragraph of the Federal Law of the 13th June 1911 on sickness and accident insurance the Confederation pays to recognized funds in the mountain region where communications are

difficult and the population sparse, a mountain supplement of 7 francs at most for each insured person. Both from the genesis of the Federal Law and from the discussions in the Federal Chambers, it results that originally this supplement was regarded as a special subsidy to ensure medical treatment in view of its expensive character in mountain regions..

On this account the question was raised as to whether the supplement was not to be paid except to those sick funds which provided medical treatment and medicine in kind to their members, in view of the fact that with regard to the payment of specific out-of-work allowances the mere circumstance that the insured person lives in a mountainous region does not occasion any additional expense to the funds which only pay out-of-work benefit.

The wording of the law, however, does not allow of a different treatment of those societies which provide medical attention and those which allow out-of-work benefit. For this reason the Federal Council has decided that the mountain supplement must, in principle, likewise be paid to this last description of funds.

In order however that account may be taken of the purpose of grant of the mountain supplement, the Federal Council has invited the Department of Public Economy to make the payment of the mountain supplement to those societies which only grant an out-of-work benefit conditional upon such supplements being employed to diminish the expenses of medical treatment and medicines supplied to their members.

The Department was instructed to take the necessary steps for carrying this decision into effect.

2) Independently of the mountain supplements paid to recognized societies, the Confederation also places at the disposal of the cantons for their benefit or that of their communes in mountainous regions, allowances in favour of those institutions the effect of which is to reduce the costs of sick or childbed treatment. The opinion was expressed that these allowances could not be paid together with the mountain supplements, but that they were only to be granted where and in proportion as sick funds did not exist in the regions in question. The Federal Council, on the basis of the object and wording of the law, has decided in principle to grant the Federal subsidy provided by article 37, paragraph 3, even when sick funds exist in the mountainous region in question.

3) By virtue of article 22 of the law, the cantonal governments fix the medical and pharmaceutical tariffs which are to serve as the basis for the agreements to be entered into between the funds providing medical and pharmaceutical assistance on the one hand, and doctors and chemists on the other.

According to article 73, this article 22 is applicable by analogy to the medical and pharmaceutical assistance due from the Swiss National Accidents Insurance Fund of Lucerne in the matter of compulsory insurance against accidents.

The cantonal governments must consequently fix two tariffs, one for the sick funds and the other for the national fund. On the proposal of the National fund, several figures of this tariff are higher than those of the

tariff for sickness insurance. Article 55 authorises the National fund to transfer to a sick fund expressly qualified for that purpose the insurance of the persons insured with it during the first six weeks following the accident.

As the law contains no clear provision on this subject, the Federal Council had to decide whether the medical and pharmaceutical tariff of the sickness insurance or that of the accidents insurance is to be applied to the medical treatment furnished by recognised funds in the sphere of activity of accidents insurance organized by the State. The Federal Council has pronounced in favour of the applications of the tariff fixed for accidents insurance.

Part III: Credit

UNITED STATES.

THE PART PLAYED BY BANKS IN AGRICULTURAL ECONOMY IN KANSAS.

SOURCES:

LEEDY (J. W.): Banks that Serve the Farmers. *The Grain Growers' Guide*, 8 *March* 1916. Winnipeg.

The State of Kansas furnishes a remarkable example of a banking organization intended to provide farmers with that credit which is indispensable for the proper development of their farms, which organization is constituted on such rational lines that it ensures the necessary assistance to farmers deserving it, and gives the maximum security to depositors. For close on twenty years the bank law has stood the test of practical experience, and along with other legislative measures and modifications in farming methods, but to a greater extent than these, it has contributed to the springing up in that State of the great prosperity which it now enjoys. We take the following particulars from a speech recently made at Calgary (Canada) at the 8th Annual Meeting of Farmers of Alberta, by the Hon. J. W. Leedy, late governor of Kansas.

§ 1. THE BANKING SYSTEM IN KANSAS.

a) *State Control.* — The present banking system in Kansas, which enabled agriculture in that State to undergo extraordinary development, is the consequence of the persistent efforts of the farming class, desirous of improving its position, which had been seriously compromised by a very grave crisis due to the almost absolute absence of credit.

About 1890, the position of agricultural economics in Kansas was such as to justify extreme anxiety. American capital held back, and local resources afforded no assistance to agriculture. Homestead settlement, entirely at a standstill, gave place to a threatening movement of retrogression; thousands of farmers abandoned to their creditors their

lands encumbered with mortgages, finding it impossible to continue working them, all financial accommodation being refused them. Even those who were not in debt in many cases discontinued work and sold up their properties, succumbing to the discouragement all around them. The census of 1890 indeed contains a striking presentment of the situation : it shows that at that date the poorest State in the Union was Kansas ; the average wealth per head did not amount to $ 923.

Energetic action was necessary to stop the desertion of the countryside. This was realised by the Farmers' Alliance of Kansas, which immediately entered upon an energetic campaign in order to secure legislative enactments enabling them to procure the necessary credit for farming operations. The first law was passed in 1891. After a six years' struggle, in the course of which the deficiencies of this first organising force were brought to light, a law on banking was passed in 1897 which met the requirements of farmers.

The following were the principal bases of this law. Its point of departure consisted in considering every bank, whether a registered company or purely private undertaking, which accepted deposits, as a semi-public institution and consequently subject to the regulation and control of the State. Every six months, all the banks in Kansas must furnish the Government regularly with a statement of their operations. The *Banking Department* may even, if it thinks fit, require a statement of the position of this or that undertaking to be submitted more frequently. These statements are certified correct under affidavit, and the banker must furthermore give all information and elucidations which may be required from him. A delegate of the Bank Commissioner has authority to inspect as often as he wishes the books of these establishments, and if the banker has knowingly made a false statement he is liable to particularly severe penalities. The obligation incumbent in that case on the Commissioner is strictly specified in a clause of the law as follows : " It shall be the duty of the Bank Commissioner, or either of his deputies, to inform the county attorney of the county in which the bank is located of any violation of any of the provisions of this act which constitute a misdemeanour or felony by the officers or employees of any bank, which shall come to his notice, and upon receipt of such information, the county attorney shall institute proceedings to enforce the provisions of this act ". This stringent enactment and the continuous control of the Commissioner have resulted in making the operations of the banking establishments safe beyond all question.

b) *Foundation Capital.* — Having in this way laid down the principle of direct State supervision, the State Assembly of Kansas, giving effect to the suggestion of the Farmers' Alliance, laid it down as the second principle that in the interests of farmers the formation of small local banks should be promoted. Therefore the law authorised the registration of banks with a minimum capital of $ 10,000 and upwards ; and out of the 943 establishments registered after the promulgation of this law, the majority had a capital of less than $ 15,000. The law furthermore providing that when the deposits received by the banks during a period of six months should amount to

a sum exceeding ten times the capital, the latter was to be increased, many of these undertakings afterwards had to proceed to make the prescribed increase ; but at the present time there are still 200 to 300 of them with the minimum capital of $ 10,000, because new ones are constantly being founded.

c) *The Loan System.* — The multiplication of local banks and the obligation on the majority of directors of each establishment to reside in the county where the bank is located or the neighbouring counties, determined the method of loans, which is extremely favourable to the farmers. The loans are granted on real and personal property, and also against personal surety, at a rate of interest which cannot exceed the legal rate. At the time when the law was passed the legal rate was 12 % ; it has been reduced to 10 % since then, but the majority of the loans are at present at 7 or 8 %, and if the guarantee is quite first-class 6 %. Needless to say, loans on personal surety are only possible where the bank knows the borrower and can rely on the individual qualities of the farmer as an active factor in the working of his business. The result has been an unquestionable rise in the moral level of the agricultural population, because lazy persons, gamblers and spendthrifts found themselves unable to obtain the credit which they needed. They were therefore eliminated or had to mend their ways.

We may also, as regards credit facilities granted to farmers, point out the modification of the *chattel mortgage law*, which enabled them to obtain from the cattle commissioners the number of cattle they desired to have in order to turn their forage to account, although they did not possess the necessary money to buy the animals. The Commissioner delivers the animals to the farmers, taking a mortgage on the animals equal in amount to the net price plus the costs of transport and commission. The costs of executing the mortgage are only one dollar. The vendor afterwards discounts his claim at the Bank. This class of operations, which did not exist in 1893, totalled in 1915 the sum of $ 50,000,000 in the cattle market of Kansas City.

d) *The State Guarantee of Deposits.* — The law of 1897 was amended in 1909 by an additional law, by virtue of which any bank could obtain the guarantee of the State for its deposits by depositing and sinking in the hands of the latter from 400 to 500 dollars in interest-bearing securities, in addition to a small sum in cash, This provision was not compulsory, but the banks availing themselves of it were entitled to place on their windows the following inscription of a very reassuring nature to the public : " Deposits entrusted to this bank are guaranteed by the State ". This means that if such bank should become insolvent, the State Treasurer immediately delivers to the depositors a certificate for the sum due to them, whatever its amount, bearing interest at 6 %, which can be realized in cash, at any bank in Kansas, if the bearer is in need of money. This certificate remains in circulation until the time when the bank which had suspended payment is in a position to redeem it from the holder, and if the bank is unable to do so, it is the Government which effects its redemption.

At the outset, large establishments were little inclined to profit by the

power granted them under the law of 1909; they were indeed afraid of having to pay for the small banks, the financial solidity of which did not inspire them with sufficient confidence. They soon found, however, that thanks to the supervision exercised by the State, suspensions of payment were extremely rare, and that the risks of their deposit being absorbed by the payment of the liabilities of bankrupt undertakings was exceedingly minute; on the other hand they realized that the local guarantee was very effective in attracting the savings of the public to the institutions enjoying it. Consequently the number of those who accomplish the necessary formalities to obtain the State guarantee is constantly increasing.

e) *Winding up of banks avoided.* — The law authorises the Bank Commissioner to take over for six months, with a view to consolidating their position, the administration of banks which are crippled by reason of temporary difficulties. This enactment has in practice enabled the winding up of these establishments to be avoided, while considerably reducing the expenses in connection therewith. The following example shows the indisputable advantages of this method. In 1913, the farmers of Kansas lost their entire crop of maize owing to the drought. The consequence was that 7 banks were compelled to suspend payments. Instead of appointing receivers under court supervision, the Commissioner took directly in hand the matter of ensuring their operations during the period of crisis. The results obtained were exceedingly successful, as may be judged from the following: In the case of the *Courtland Farmers' and Merchants' Bank* $ 82,647 deposits), the costs of consolidation amounted to $ 83.17; in that of the *State Bank of Rostoria* ($ 19,230 deposits) to $ 215.80; in that of the *Severy State Bank* ($ 81,522 deposits) to $ 548.84; for the *Citizens' State Bank of Ellinwood* ($ 116,472 deposits) to $ 572.02; for the *Beattie Bank* ($ 48,882.26 deposits) to $ 925.33; and for the *Farmers' State Bank of Cedar Point* ($ 83,247 deposits) to $ 47. The expenses in connection with the seventh bank were also small, and owing to the assignment of their book debts to other establishments through the agency of the Commissioner, all were able to meet their engagements and continue their operations without loss to anyone.

§ 2. The development of agricultural credit operations.

The following passage from the letter written by Mr. Charles M. Sawyer, Bank Commissioner, to the Governor of Kansas, submitting his report, on the 1st September 1914, puts on record the profound transformation undergone by agricultural economy in that State, and the happy influence exercised by the enforcement of the laws of 1897 and 1909: "In submitting this report I desire to call your particular attention to the fact that the conditions during the past year (1913) have been most unusual and trying. The principal crop—corn—was practically a total failure, and the forage crops very short. The banks were called upon to finance the purchase

of $ 20,000 worth of grain and feeds. Coming, as it did, at a time of world-wide monetary stringency, following a period of widespread expansion in business, the situation was made doubly difficult. The way the banks have met this real need without forcing undue sacrifice upon their patrons is a splendid tribute to the solidity and good management of the banks ". Twenty years beforehand, i. e. before the organization of this powerful mechanism of credit, it is probable that the only recource available to the farmers to ensure their livelihood and the continuance of their work during the following year would have been to get rid of their cattle for next to nothing, in spite of the disastrous consequences which would have ensued to them. The exceedingly useful function of the banks which furnished credit to farmers under State control is therefore made fully evident in the light of these facts.

The influence of the law on deposit operations — the amount of which grows in proportion as the confidence of the public increases — forms an interesting element which allows of appreciating at its true value the credit system in force in Kansas.

When the first outline of the law was passed in 1891, all the State Banks came under Government control, whether they were small private undertakings or registered establishments. At that time the banks of the latter class obtained registration by an expenditure of $ 2, without any guarantee to the public, as they were in no way bound to publish accounts or furnish a statement of their true position. In 1891 they numbered 414, and the aggregate of their deposits amounted to about $ 15,000,000. During the six years' struggle to improve the law the deposits remained almost stationary. In October 1891 indeed they amounted to exactly $ 15,753,438, and in March 1897 when the law was amended they stood at $ 15,975,501. Since then, however, the increase has been rapid and constant. In 1910 the deposits were $ 102,667,400; in September 1914, $ 113,208,207, and in March 1915 about $ 128,000,000.

The aggregate capital of these banks amounted to $ 23,500,000 and in March 1915 their loans totalled $ 103,000,000.

As regards the effectiveness of supervision the Commissioner says: " In conclusion I will say it is a gratifying fact that no depositor of a Kansas State Bank has lost a single dollar through the failure of a bank for the past six years ".

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These facts explain the conclusion, both practical and enthusiastic, of the speech made by the late Governor of Kansas " Tens of thousands of hired hands have, through the operation of this law, become renters; tens of thousands of renters have become land-owners, and I must add that

hundreds of thousands of discouraged, dispirited or inefficient farmers have been straightened up and have become good and prosperous citizens of the county..... What is required is small banks which will reckon in dollars and cents and not in thousands and millions. The banker doing the farmer's business in the small town does not have to be a man who understands international finance, or foreign exchange, or the underwriting of bonds, but he must know a hundred dollar horse from a fifty dollar horse for that is the kind of security which he has to take".

SERBIA.

AGRICULTURAL CREDIT IN THE KINGDOM OF SERBIA.

OFFICIAL SOURCES:

Статистички Годишњак Краљевине Србије за 1907 и 1909 (*Statistical Yearbook of the Kingdom of Serbia*). Belgrade, 1913.

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OHTER SOURCES:

Mitrovic (V. J.). Die königlich serbische Staatshypothekenbank, Uprava Fondova. (*The Serbian Government Mortgage Bank, Uprava Fondova*). Munich, 1907.

Комадинић (М.): Зират Банка (Турска Землоделничка банка) (M. Comadinitch, "*Zirat Banca*": *The Agricultural Bank of Turkey*). Belgrade, "Economist" July 1st, 1913.

Introduction.

Agricultural credit was one of the first problems to claim the attention of the Serbian Government.

Under the treaty of peace signed by Prince Milosch and Pascia Marascilia in 1815 Serbia, although still a Turkish province, enjoyed a fair degree of autonomy, especially in financial matters, being fully authorized to draw up and put into execution her own budget.

During the first decades of this phase of her political life the budget always closed with a notable surplus. Thus, for instance, from 1815 to 1843 there was a surplus of 22,675,407 grosch, equivalent to about 9,000,000 francs.

At that time the only form of economic activity in the country was agriculture, and the Government decided to favour its development, setting aside the budget surpluses as a fund out of which to grant agricultural loans. At first these loans were made for short periods (from 1 to 3 years) but gradually they were converted into real mortgage loans running

for twenty-three and a half years. Agriculture enjoyed this advantage until 1860, that is to say as long as the budget closed with a surplus.

Although agricultural credit has long been the subject of special care on the part of the State, yet it can be asserted that even now it is undeveloped and poorly organized. This is due to political conditions and to the mode of distribution of landed property.

From 1815 to 1876 Serbia had to fight for her political independence, then, from 1878 to 1903 came a period of struggles between the Monarchy and the people, side by side with efforts to secure emancipation from foreign markets. In these circumstances it was impossible to press the development of the several branches of economic activity.

The system prevailing in Serbia of small and often minute holdings was for many years a hindrance to the formation of co-operative societies which were only founded in 1894.

Agricultural credit is now fed by three different sources :

(1) the " *Uprava Fondova* " (Government Mortgage Bank) and the " *Zirat Banca* " (Agricultural Bank) ;

(2) co-operative credit societies ;

(3) private banks and capitalists.

The " *Uprava Fondova* » and the " *Zirat Banca* " are government mortgage banks. They make long term loans to farmers, in the shape of mutual land loans, mortgage loans and improvement loans.

In this article we shall deal with agricultural credit only in so far as these two banks are concerned.

The co-operative credit societies make short term loans (from one month to two years). Their purpose is to supply farmers with the circulating capital required for the purchase of seed, draught cattle, farm implements, etc. We will deal with this form of agricultural credit separately when studying these co-operative societies.

Private banks and capitalists make both short term and long term loans. It is probable that the total value of these loans exceeds the total of the others but the lack of positive data prevents us from making a study of them.

The banks cannot lend money direct to the farmers, as they are forbidden by law to endorse notes, but they do so through the agency of capitalists who thus become debtors to the banks and creditors to the farmers. This is why agricultural credit transactions do not figure on the balance sheets of Serbian banks.

Most of these private capitalists are grain, live-stock or fruit merchants. The form such loans take is that of " advance purchase ", that is to say the farmer sells to the money-lender, generally at a low price, his standing crops. The capitalists who transact this kind of business are called " *zelenasci* " a word which means usurer. Besides these there are real loans, but the rate of interest charged is generally excessive (from 20 to 30 per cent). As the law forbids charging an interest rate of more than 12 per cent, the excess amount is added to the capital lent.

Public contempt pursues these exploiters of the ignorance and poverty of the farmers, and they therefore conceal their transactions. This makes it impossible to study this form of agricultural credit.

§ 1. The "uprava fondova" from its foundation to 1898.

During its 1837 session the "Narodna-Skouptcina" enacted a law providing the funds required for building schools and hospitals. At first they were supplied by donations, but it was soon seen that these would not suffice and a poll-tax was ordered. From 1838 to 1845 trustee and legacy funds, and those for church endowments and for pensions to widows and orphans of government employees were also constituted. To increase the capital of these funds and so as not to leave the money inactive it was decided in 1841 to invest it in short term mortgage loans, maturing in from one to three years.

In the early years of the decade 1860-70 the government administration was centralised. All the State banks were united and the funds above enumerated were merged into one to which were added private and municipal deposits in Government banks. (Act of October 16th, 1862). A special "Direction of Funds", "*Uprava Fondova*", was then created to administer these moneys and to invest them in mortgage loans. Thus a government mortgage bank, administrered by the Ministry of Finance, was constituted.

The Act of October 16th, 1862, fixed the sphere of action of this bank as follows:

(1) The bank can only make first mortgage loans, which may not exceed one half of the appraised value of the mortgaged land.

(2) All loans run for long terms (thirty-two years).

(3) No loan may be for less than 1000 grosch (about 400 francs).

(4) The debtor pays 6 per cent interest. (The State reserves to itself 3 per cent of the interest on deposits and 1 per cent of that on funds).

(5) All loans are guaranteed by the State.

(6) Loans are made in gold, silver, or paper money.

In 1880 an experiment was made in paying loans in the form of land bonds, but it was not a success and had to be given up because the borrowers, unacquainted with the market for such bonds, sold them at 20 and even 30 per cent below their value.

The "*Uprava Fondova*" was authorized to issue and sell land bonds with the consent of the Minister of Finance and for an amount not to exceed the sums granted by it on mortgage loans.

The issue of these bonds was twice made by the Bank itself. In 1874 it was authorized to issue them for a nominal value of 12 million francs, but had to suspend the sale owing to the excessive fall in their market value (from 80 to 50 per cent) due to the economic crisis of 1873. Again in 1886 it sold bonds on behalf of the State for a nominal value of twelve and a half million francs at the rate of from 83 ½ to 50 per cent of their face value, to the Berlin Commercial Bank (*Berliner Handelsgesellschaft*).

During the first thirty-six years of its life, that is to say up to the time of its reorganization, the benefits derived from the " *Uprava Fondova* " were restricted. The Belgrade land-owners whose lands were near the capital, and large rural land-owners who were able to arrange for big loans, derived great benefit therefrom, not so the small country land-owners, as the bank had no branch offices in the villages and the costs, amounting to at least 200 francs on each transaction, were too heavy for small loans. For this reason small holders generally applied for assistance to large land-owners who obtained money from the bank and then lent it to them.

Nor was the administration of the " *Uprava Fondova* " successful. The land appraisers not being held responsible for their estimates often made inaccurate valuations, so that many credits became of doubtful value. The balance sheet for 1895 shows that of all its outstandig credits, then amounting to 25,400,508 francs, 12,093,665 consisted in unpaid and capitalized interest. The State had to disburse about 10 million francs to make good the loans it had guaranteed.

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As stated, the " *Uprava Fondova* " only makes mortgage loans, therefore to meet the need for short term agricultural loans the Government organized the so-called provincial banks under the supervision of the Ministry of Finance. These made small loans (from 60 to 6000 francs) for short periods (from one to three years).

These banks were, however, unsuccessful, so much so that they went out of business after three or four years. The provincial banks were officially liquidated in 1895 and their business was wound up by the " *Uprava Fondova* ". Their failure was due to the high figure fixed as a maximum amount for the loans. In three to four years all the capital of these banks was absorbed in loans to large land-owners, to whom small farmers were obliged to apply in their turn. The only advantage derived from them was that they somewhat facilitated business dealings between the several villages and the " *Uprava Fondova* ", as they collected on its behalf payments due from debtors.

§ 2. The reorganization of the " uprava fondova " under the 1898 act.

We have already seen that the " *Uprava Fondova* " during the first thirty-six years of its life was not successful, and this led to its reorganization in 1898. As a result, is was removed from the management of the Ministry of Finance, given a larger measure of autonomy, and placed under the supervision of the Ministry of Commerce.

All its business is controlled by a board consisting of seven members, a director appointed by the Minister of Commerce, three members of Parliament elected by the Chamber, a University professor, a Councillor of State, and a Merchant. The Academic Council of the University, the Council of State and the Administrative Council of the National Bank each nominates two University professors, two Councillors of State and two merchants, and the Minister makes the appointments. The Director is appointed for five years, the other members of the Board only for four.

Supervision by the Minister of Commerce is exercised indirectly by a Board of Vigilance consisting of five members, appointed by the Minister himself, who remain in office for five years.

The members of the Board of Management and the Board of Vigilance are replaced alternately, two by two.

The Central Bank with its seat in Belgrade has branch offices in the chief provincial towns, managed by employees appointed by the Central. These branch offices collect payments and act as agencies between the Central and its clients, supplying information on the solvency of those indebted to the bank or who apply for loans, on the quality of the mortgaged lands, etc., but they may not grant themselves loans.

The circulating capital of the "*Uprava Fondova*" consists of funds and deposits, new resources having been added to those originally assigned to it. Their total value is shown by the following table :

	Frs.
Hospital Funds	9,015,315.95
School Funds	2,616,960.90
Pension funds	12,525,938.40
Forestry funds	2,810,129.30
Insurance against hail funds	1,723,059.30
Live-Stock insurance funds	156,627.20
Water-course regulation funds	1,071,840.90
Road building funds	785,366.85
Miscellaneous funds	28,033,124.70
Trustee deposits	4,788,209,80
Judiciary deposits	5,994,071,41
Church and Convent deposits	325,981,33

Besides these funds and deposits the circulating capital of the "*Uprava Fondova*" consists of reserve funds and of deposits made by private parties. The reserve funds amounted in 1913 to 1,000,000 francs and private deposits to 6,796,743.50 francs.

From the banking standpoint the "*Uprava Fondova*" ought not to invest private deposits, which come under the category of short term loans, in mortgage loans made for long terms. In practice, however, this investment of the money has given rise to no difficulties, not even during the Balkan wars. Private deposits are only nominally made for short terms ;

in reality they are for long terms as the depositors are capitalists on the look out for permanent investments who do not wish to invest their capital only for a short time.

The above reorganization carried out in 1898 enlarged the sphere of action of the " *Uprava Fondova* ". Besides making mortgage loans, it was authorized to lend money to the Government and the municipalities, such loans being guaranteed by national and municipal revenue receipts.

The loans made to the Government were always of little importance. At the end of 1913 the Government indebtedness to the bank amounted to 2,987,043.60 francs on current account, and the loans made to the peasantry for their support during bad years amounted to 2,956,321.80 francs. On the other hand, the loans to municipalities developed rapidly. At the end of 1913 they amounted in all to 49,938,375.55 francs.

The law of 1898 regulated mortgage loans as follows: such loans may be made on :

(*a*) urban building-lots ;

(*b*) urban buildings, built of solid materials, and included within the municipal area ;

(*c*) on suburban lands and lands situated in their vicinity (fields, meadows, pasture lands, orchards, vineyards, market gardens, etc.) exclusive of the value of any buildings erected thereon.

Mortgage loans may not be made on buildings constructed of perishable material, or erected for non-profit earning purposes such as hospitals, schools, churches, etc., on mines, manufacturing plant, village inns, lands in the vicinity of lakes or rivers subject to floods.

As these rules show, the " *Uprava Fondova* " only accepts as security real estate yielding a steady income, not subject to risk, which can be sold at any time (1).

(2) All loans are made on the security of first mortgages for an amount not exceeding one half of the appraised value of the property.

The appraisement is made by a Commission of 5 persons appointed by the " *Uprava Fondova* ", one of whose employees is often present. The appraisers must state whether the value of the property is likely to increase or decline, whether it is exposed to danger from natural causes, etc.

(3) All loans are made for 32 years. The borrower may repay his indebtedness before the expiration of this term on giving 6 months' notice, but the " *Uprava Fondova* " cannot recall the loan before maturity unless the borrower should fail to pay his amortization annuity, or the property should be suddenly exposed to some danger.

(4) Loans may not be made for less than 500 francs.

(5) The maximum rate of interest is 6 per cent, payable in advance. The law fixes no minimum rate, so the " *Uprava Fondova* " may make loans at a lower interest rate.

(6) The loans are made in gold or silver, never in land-bonds. The

(1) See the Parliamentary Reports for 1898, pp. 51-471.

choice depends solely on the Bank : it can pay in gold a loan asked for in silver, or vice-versa.

(7) Government guarantee is done away with, but holds good for those loans granted prior to the reorganization of the Bank. On the other hand, the procedure for foreclosure, when carried out on behalf of the " *Uprava Fondova* ", has been simplified, as for other concerns it is so complicated that proceedings are often prolonged for years and years.

With the consent of the Minister of Commerce, the " *Uprava Fondova* " may issue land-mortgage bonds secured by its mortgages and municipal bonds for loans to municipalities. The total value of each of these two securities may not exceed the amount respectively lent on mortgages or to municipalities.

The land-bonds may be with or without premiums and are amortizable in 32 years They are payable to bearer and are guaranteed by the State.

Until four or five years ago the " *Uprava Fondova* " abstained from issuing such bonds, fearing that they would lower the value of those already on the market. In 1909 the actual total value of these latter was 800,000 francs less than their face value. This state of things altered in 1910 : the " *Uprava Fondova* " was then compelled to make a loan of 30,000,000 francs for which it gave its creditor a like amount in land-bonds, bearing interest at the rate of 4 per cent.

The balance sheet for 1913 shows the nominal value of all the land-bonds then in circulation amounting to 1,219,200 francs at 5 per cent and 29,281,000 at 4 ½ per cent.

§ 3. The results of the " uprava fondova's " mortgage credit.

At the end of 1913 the mortgage business of the " *Uprava Fondova* " showed loans made for a total amount of 75,803 836.70 francs. Of this sum 4,578,373.60 francs were accounted for by loans granted before the reorganization effected in 1898, and 71,225,463.10 by loans made since that date.

The balance sheet for 1913 does not classify, as did that of 1909, the various categories of borrowers to whom mortgage loans were made and the totals for each class.

At the end of 1909 the total loans made on mortgages amounted to 45,565,915 francs, divided as follows :

(1)	Loans made in Belgrade .	Frs.	23,912,596 or	52.4 %
	(*a*) to farmers	,,	181,172	
	(*b*) to non farmers . . .	,,	23,731,424	
(2)	Loans made in other cities	,,	14,700,179 or	32.4 %
	(*a*) to farmers	,,	281,672	
	(*b*) to non farmers . . .	,,	14,418,507	
(3)	Loans made in villages .	,,	6,953,140 or	15.2 %
	(*a*) to farmers	,,	5,158,974 »	
	(*b*) to non farmers . . .	,,	1,794,166	

By separating the agricultural from the non-agricultural loans we get the following statement :

(1) Agricultural loans . .	Frs.	5,621,818 or	12.30 per cent.
(2) Non-agricultural loans	»	39,944,097 »	87.70 per cent.

If we presume, as is not unlikely, that the ratio remained stationary during the ensuing four years, we should have the following statement for 1913 :

(1)	Loans made in Belgrade	Frs.	39,721,210.60
(2)	,, ,, ,, other cities	,,	24,560,443.20
(3)	,, ,, ,, villages	,,	11,522,182.90
(4)	,, ,, ,, to farmers	,,	9,323,871.90
(5)	,, ,, ,, non-farmers	,,	66,479,964.90

These data lend themselves to the following considerations :

(*a*) The business done by the "*Uprava Fondova*" is very small as compared both to the available capital and to the length of time covered;

(*b*) More than half of the total amount lent has been granted to non-agriculturists of Belgrade and other cities, while the agricultural loans made in the villages only account for a minimum of the business done. This shows that the "*Uprava Fondova*" has been adequate to meet the requirements of urban mortgage credit but not those of agricultural mortgage credit.

The causes of this are :

(1) That the circulating capital available for the "*Uprava Fondova*" is inadequate to the requirements of agricultural credit. It is therefore essential that it follow the exemple of all similar foreign banks and secure by a loan, i. e. by the emission of land-bonds, the requisite funds.

(2) That the restricted number of its branch offices, which are used only for collecting debts, hinders the work of the "*Uprava Fondova*" in localities at a distance from its headquarters at Belgrade. The "*Uprava Fondova*" will, therefore, have to organise many other branch offices and empower them to grant loans within the districts under their management, subject to the supervision of the head office.

(3) That the minimum amount of the loan, fixed by the law at 500 francs, and the excessively high costs (200 francs at least) which have to be met, especially in the case of small loans, make it impossible for more than half of the city land-owners to avail themselves of the services of the "*Uprava Fondova*". Now, as is known, small and average-sized holdings prevail in Serbia, while the homestead laws forbid securing debts on holdings of from 3 to 4 hectares, the income from which is required to ensure a bare livelihood. This means that in order to render a service to average-sized and small holders the minimum amount fixed by law must be lowered, reducing the costs.

Besides the causes above set forth, consequent on the defective organization of the "*Uprava Fondova*" and such as it can therefore eliminate, there are others which can only be eliminated by government action. We will mention the more important.

In Serbia the cadaster has not yet been completed although it was begun 25 years ago, and there are no land-registration books. It is true that there are the so-called *tapie* or title deeds for each holding or estate, but they do not ensure publicity nor indisputable certainty of titles. In many districts the title to land, especially forest land, is disputable, whereas it is well known that a cadaster, land-registers, and the accurate delimitation of holdings are essential conditions for the development of mortgage credit.

§ 4. The "zirat banca".

In 1864 Midat Pascia, *volija* in the pascialate of Nisch, organized the so-called *Menefi-Sanduc*, a provincial bank financed by tithes paid by the farmers; the capital of which was intended to form a fund out of which to grant them loans. After two years Midat Pascia handed in the balance-sheet to the Turkish government, which expressed its satisfaction, and ordered all the pascias in the Empire to organise similar banks in the districts subject to their administration. The organization of these banks, was the same as that of the bank founded by Midat Pascia, except that they were authorized to grant loans not only to farmers but also to traders and artisans.

Twenty years later a Commission was appointed to study the results of the work of these banks and to suggest necessary amendments.

The Commission handed in its report in 1888, showing:

(1) That the management of these banks was defective as they were administered free of charge by inexperienced persons and were not subject to government inspection.

That agricultural loans were but an insignificant feature of their work as almost all the capital was lent to non-farmers.

The Commission suggested the following steps:

(*a*) That the banks be placed under government inspection;

(*b*) That the voluntary administrators be replaced by a salaried staff.

(*c*) That loans to non-agriculturists be no longer made.

The government accepted these proposals, and on August 15th, 1888 a law was enacted for the reorganization of the Menati-Sanducs, known as the law on the State Mortage Bank called "*Zirat-Banca*".

Organisation and administration. — The law provided for a government mortgage bank with head-quarters at Constantinople; the *Menati-Sanducs* then in existence were to become its branch offices, and local banks were to be opened in the capital towns of the Sanjakates.

The bank, or rather its head-quarters, was placed under the supervision of the Ministry of Commerce and Public Works, the business to be

managed by a Board of Administration consisting of nine persons, two directors appointed by the Ministry of Commerce, a Councillor of State, a member of the Government auditing department, a member of the Chambers of Commerce, a member of the Chambers of Agriculture, and three other members, appointed respectively by the Ministers of Commerce, of Finance, and of Public Instruction. The cashier and the accountant were also to be appointed by the Minister of Commerce.

The Vigilance Committee was to consist of 5 persons appointed by the Ministers of Commerce, Finance, and Public Instruction.

Branch offices were to be opened in the capital towns of the Vilajets. In 1909 there were 62 in the whole Turkish Empire. In Serbia there are two, one at Scoplje (Usküb), the other at Monastir.

The branch offices, like the Central, have their Boards of Administration consisting of six persons : two employees appointed by the Minister of Commerce, two town councillors, two members representing the Chambers of Commerce and the Chambers of Agriculture. Where such Chambers do not exist the Commune appoints two more representatives of its own. There are no special Vigilance Committees for the branch offices. The duties of such are performed by the two employees appointed by the Government and by those appointed by the Central Bank. Except for this supervision, the branch offices enjoy complete autonomy. They are empowered to recover all debts, to make loans, etc., they are only required to send an annual statement of accounts to the Central Bank.

The local banks have their offices in the capital towns of the Sanjakates. In 1909 there were 421 in the Turkish Empire ; in Serbia there are about 25.

They, too, have their Boards of Administration, but their management is dependent on the branch bank in their respective *vilajets*. The loans which they grant must have the sanction of this branch bank.

The Capital. — In the matter of capital the *Zirat Banca*, or rather its branch offices are, so to speak, the heirs of the *Menati-Sanduks*. The whole of the circulating capital of these latter as well as their credit assets, were handed over to their respective branch banks. The same holds good of their revenue : the branch banks now receive the additional half per cent, super-tithe formerly paid to the *Menati-Sanduks*.

The law fixes the total amount which the capital of the Zirat Banca is to attain at 25,000,000 Turkish pounds. The $^1/_2$ per cent addition to the tithes is to cease as soon as the capital amounts to 10,000,000 Turkish pounds. The remainder, up to the amount of 25,000,000, is to be furnished out of profits earned ; after which all profits will accrue to the State.

At the end of 1909 the capital of the *Zirat Banca* amounted to 10,000,000 Turkish pounds ; nevertheless the $^1/_2$ per cent super-tithe tax continued to be collected as before. The money furnished to the Central or to a Branch Office is entered to its debit.

The data on the cash in hand and the credit assets of the branch offices at Usküb and Monastir, that is to say of the branch banks in Serbian

territory, are not yet complete ; but it may be reckoned that this capital amounts to not less than 15,000,000 francs.

Transactions. — The law authorizes the *Zirat Banca* to

(1) make mortgage loans to agriculturists ;

(2) make loans to the State ;

(3) accept deposits ;

(4) transact agricultural business on commission ;

(5) collect certain forms of revenue for the State and make payments on its behalf.

We will restrict ourselves to a study of the first kind of transaction, merely giving a few figures for groups 2 and 3. At the end of the business year 1909-10 deposits amounted to about 200,000 francs and loans granted to the State to about 50,000,000 francs.

As to mortgage loans, the law provides that :

(1) The bank may only make loans to agriculturists and they are generally secured by mortgages. In view of the feudal system which prevails in the country the Bank allows the *Cipcija*, farming land belonging to an *Aga*, to offer a surety willing to mortgage his lands to the bank.

If the land to be mortgaged is "*mulk*", that is to say the personal property of an individual, it can be mortgaged without further ado ; if, on the other hand, it is "*vakuf*" or *Erasi Mirie*, that is to say land belonging to the State or to corporations, a sale *pro forma* is required, as the law does not permit such lands to be burdened with endebtedness. The property is sold to an employee of the Bank's as the Bank itself is not allowed to own land, and this employee in his turn mortgages it to the Bank.

Exceptionally the Bank may grant agricultural loans for short terms without mortgage security, but on collective security, to tobacco growers for not more than 5000 grosch, and to farmers who have suffered loss from natural causes (harvest failure, fire, flood, and so forth).

(2) The loans are made for short terms (3 to 12 months) and for long terms (3 to 10 years). In the first case, interest is paid in advance, and the loan is repaid in a bulk sum at maturity. In the second case, loans are repaid by instalments. Their life many be prolonged in cases of crop failure.

(3) The interest rate is 6 per cent. The Bank deducts from long term loans 1 per cent for management expenses.

(4) Under the provisions of the law the Bank may not make a loan for more than 15,000 grosch, but in practice it has made loans for larger amounts.

(5) Foreclosures made on behalf of the Bank are relieved by law from all formalities, so that the Bank can recover the sums due to it within two or three months.

***

As already stated, the *Zirat Banca* was organized to meet the requirements of agrarian credit ; yet agriculture has derived hardly any benefit therefrom owing to the still prevalent feudal system.

The tillers of the soil are rarely land-owners : the land belongs to the feudatories (*Aga*) who alone can offer it as mortgage security, thus obtaining money on loan from the *Zirat Banca*. Such loans however do not benefit agriculture as the *Aga* applies them to his own ends, lending the money again to traders and artisans who cannot obtain credit from the bank as they are not land-owners. Tenant farmers can only obtain loans if they happen to be tobacco-growers, or if their crops fail, but they must then offer collective security.

In 1908 the total loans made by the *Zirat Banca* amounted to 489,556 Turkish pounds. Of this amount 477,140 Turkish pounds, i. e. 86 per cent, was lent to land-owners, and only 67,416, or 14 per cent to farmers.

During the Balkan wars many of the papers belonging to the *Zirat Banca* were destroyed, especially those dealing with loans granted within the Kingdom of Serbia, but the Serbian Government was prompt in collecting and ascertaining all facts concerning the management of the branch offices and local banks within the Kingdom.

So far the only data available are those for the *vilajet* of Usküb for which we are able to give the following table :

Seat of the Branch office or local bank	Mortgage loans	Loans made on collective security	Interest	Total Debts
Uskub	3,451,646	728,978	399,104	4,579,728
Egri Palanca	583,610	—	23,389	606,999
Ghiglani	895.895	226,552	22,461	1,143,908
Vucitru	104,279	38,418	2,903	145,600
Prescevo	835,519	272,920	16,875	1,125,314
Cratovo	910,693	—	33,593	944,286
Prizzen	635,619	—	8,925	644,544
Gostivar	1,305,344	450	19,820	1,325,564

MISCELLANEOUS INFORMATION RELATING TO CREDIT IN VARIOUS COUNTRIES.

ARGENTINE REPUBLIC.

THE FIRST RESULTS OF THE LAW CONSTITUTING CROPS A SECURITY FOR LOANS. — *La Nacion*, Buenos Ayres, February 17, 1916. *El Estanciero*, Montevideo, VIth Year, No. 128, January 31, 1916.

The law constituting crops a valid security for loans in Argentina, which is dated the 19th October 1914, gave noteworthy results in its first year of enforcement.

A report by the director of agricultural legislation and live stock to the Minister of Agriculture gives detailed particulars of the number and amount of loan operations on the security of crops effected during the year 1915. The different offices connected with this department registered during that period 7954 contracts of a total value of 42.292.537 pesos. Out of this number 1372 contracts had been cancelled from the registers on the 3rd December 1915, owing to the repayment of the corresponding loans.

The report points out that none of the creditors was under the necessity of taking legal proceedings for recovery of the sums lent, the debtors having met their engagements with complete punctuality.

An examination of the operations for one month brings out clearly the development undergone in a short space of time by this form of credit in the various parts of the Republic, and also shows the amount of the three great classes of loans and the relation between their amount and the number.

For this purpose the above cited report classifies the loans of this description registered in January 1916 from this three-fold point of view. During that month 492 agricultural pledge contracts were registered for a total of £ 5,207,876.92. This sum is made up as follows in reference to territorial divisions: Federal capital 97 contracts of a total value of £ 2,505,956.75; Buenos Ayres 81 for £ 1,134,40.32; Santa Fé, 61 for £ 284,569,74; Entre Rios 12 for £ 296,314.38; Mendoza, 44 for £ 138,435,96; San Juan, 4 for £ 14,650; Salta 1 for £ 500; San Luis, 6 for £ 89,000; and finally Pampa, 26 contracts for 98,917.58 pesos.

If we examine the nature of the assets on which the loan was secured, we find that during the above month loans on the security of crops proper represent 2,008,389.57, loans on livestock, 2,774,942.09 and loans on agricultural machinery and equipment 424,545.26 pesos.

Finally, with regard to the amount of the contracts, the following classification is found :

Amount of Loan			Number of contracts	Total value
		£		£
From	1 to	500	52	18,755.83
»	501 »	2,000	118	166,574.85
»	2,001 »	10,000	184	1,291,838.88
»	10,001 »	100,000	112	2,504,096.84
»	100,001 »	500,000	6	1,226,610.52

These figures show that medium and large landowners in particular resorted to this form of credit during January 1916. The operations for the year 1915, however, taken as a whole, were transacted chiefly by small owners, the amount of the bulk of the loans lying between 2,000 and 5,000 pesos.

The foregoing particulars point to the conclusion that the law constituting crops etc. a valid security for loans fulfilled a real need in Argentina, and that it will contribute powerfully to the development of agriculture, which it supplies with easy credit at a low rate of interest.

CANADA.

THE BRITISH COLUMBIA AGRICULTURAL CREDIT ACT. — *The Grain Growers' Guide*, Winnipeg, May 24, 1916.

At the last session of the British Columbia Legislature, an "Agricultural Act, 1915", was passed. This act brings under its jurisdiction the entire work of promoting agriculture in British Columbia and provides a system of agricultural credit to assist it. This is the first system of agricultural credit instituted by any province in Canada and is modelled after that now in operation in New Zealand.

This act is divided into five parts : Part I. deals with agricultural credit ; Part II. with incorporation of associations without share capital. These include farmers' and women's institutes, fruit growers' associations, dairymen's, poultrymen's, stock breeders' associations, etc. Part III. provides for the incorporation of 25 persons into associations with share capital to carry on manufacturing finished farm products, keeping livestock, dealing in farm products of all kinds, as well as fertilizers, explosives, spray materials, building storage plants, and other buildings, buying land or implements, etc. These associations may group themselves into district exchanges and these again may be united under a central exchange for the province. These associations may borrow money upon mortgage bonds, or may invest any money they have on hand on the security of mortgages

or real estate. The principle of one member one vote and majority rule holds, also no member may vote at a general meeting of an association who has not sold his main crop through the association, for the past year, or who has not signed a contract to do so during the coming year. By Part VI. creamery inspection is provided for. By Part VII. a board of horticulture is instituted to regulate and direct matters pertaining to the fruit industry.

Agricultural Loans Section. — As stated, Part I. deals with the institution of a system of agricultural loans. For the administration of loans under this act an "Agricultural Credit Commission" has been formed, consisting of a superintendent and four other directors with full powers of a corporate body. The superintendent is appointed for ten years by the Lieutenant-Governor, and devotes all his time to the work. Two directors are appointed by the Lieutenant-Governor for ten years and each must have been engaged in farming in the province of British Columbia before being eligible for appointment. The other two directors are the deputy ministers of finance and agriculture respectively. A deputy-superintendent may be appointed, but he has no voting power. This commission has a department of appraisal and valuation to fix the basis of value of property on which loans are to be made. No director but the superintendent receives any remuneration. The commission meets monthly and there are special meetings on request of two directors.

Working Capital. — Money is raised by issue of securities and sums appropriated by the legislative assembly. The commission has the power to issue securities by approval of the Lieutenant-Governor by order in council for periods not exceeding 30 years and at rates determined by the minister of finance. The sale of securities is negotiated by the finance minister. Guarantee of securities exceeding £ 15,000,000 must be secured by special authorization of the legislature. All money is paid into the bank to the "Agricultural Credit Commission's Account". All money raised may be reinvested in securities until required.

A reserve fund may be established to which all net earnings go up to £ 100,000 and may be used to cover losses.

A sinking fund is established to fully provide for interest on guaranteed securities and the redemption of such securities at maturity.

Loan Regulations. — Loans may be made on agricultural surveyed land free from all encumbrances, liens and interests other than those vested in the Crown. Where loans have already been made outside this Act, loans made under the Act may be made when the total amount of the previous loan and the one applied for does not exceed the maximum capacity of the land based on valuation by the appraisal department and the consent of the holders of the first loan.

Loans may be made to acquire land for agricultural purposes and payment of encumbrances already on such land; for clearing or dyking land; storing water or building irrigation works; erection of farm buildings; purchase of livestock, machinery and fertilizers; or other productive purposes determined by the commission.

Security for loans must be determined on the basis of agricultural productiveness for the purposes just mentioned, the ability of an applicant to make a fair living for himself and his family from the farming of his land under the proposed improvements being taken into account. An association in order to receive a loan must not only be solvent and have adequate earning powers but also a clean record. Of course the opinion of the commission on the ability of the applicant to use the loan to his economic benefit is the final deciding factor. The purpose of each loan must be distinctly set forth in each and every application and any or all additional details or references as desired.

The minimum loan to individuals is $ 250 and the maximum $ 10,000. Associations may borrow over $ 10.000 only after special sanction under an order-in-council. Preference is to be shown to loans under $ 2.000. Sixty per cent of the appraised value of the land offered as security is to be the maximum amount of any loan, this to be calculated after the increased value due to the proposed improvements has been added. Loans may be given by instalments, but only when the actual purpose the money is lent for is accomplished. When a loan is approved the applicant must advance his security within three months or suffer a withdrawal of the approval and lose the fees advanced. No person connected with the administration of the Act may secure a loan, and in determining loans where the applicant is a relative of one of the directors no part must be taken in discussion or voting by that director. The same applies to partnerships or where the applicant is debtor under mortgage to an association of which any director of the commission may be a member. Mortgages to be taken either on long dated loans, short dated loans or single season loans and registered under the Land Registry Act.

Rates of Interest. — The rate of interest to be charged is not set but shall not exceed one per cent per annum more than the rate actually paid by the commission on the net amount realized from the sale of securities by which the funds for loaning were raised. Long term loans are to be repaid with interest in thirty-six and a half years, thirty years, or twenty years, i. e., within the periods mentioned sufficient will be added to the interest each year entirely to discharge the debt at the end of these periods. This combined charge shall be payable in equal half-yearly instalments.

Short term Loans. —Short term loans shall not be for more than ten years or less than three, and may vary up to $ 2,000 for an individual or $ 10,000 for an association. These loans need not be subject to amortization like the long term loans, but repayment must be made on terms suitable to the commission, in fact that part of the Act pertaining to combined interest and principal and half-yearly payments does not apply to short term loans.

Single season loans for aiding the purposes previously mentioned may be made and such will be repayable within twelve months. Two thousand dollars to individuals and $ 10,000 to associations is also the limit for these and they are secured by promissory note as well as by mortgage. Many farmers like to pay off an amortization loan before maturity and this is pro-

vided for. Additional sums of not less than $ 25 and any multiple of that sum may be paid on any interest due date.

Failure of the borrower to live up to his agreement by not repaying his loans on due date, by expending his loan unwisely or by not observing the conditions of the agreement in other essential ways empowers the commission to seize the security for the loan and dispose of it as best it can, or lease the land for a term not exceeding ten years. Losses occurring in this way are made up from the reserve fund of the association.

A pre-emptor or purchaser of Crown lands may borrow money under the deferred payment system, but of course deeds of grant cannot be issued on this land while the mortgage is in existence. Where he fails to live up to his obligations in connection with a loan the Crown grant for this land may pass to the commission which may resell it as it sees fit. Loans will only be granted to homesteaders of good standing. Loans may also be granted under this Act on security of mortgage on land for which Crown grants have not been issued in the province of British Columbia, held as homestead, pre-emption or purchase, under any Act of the Dominion Parliament of this land being forbidden until all loans are repaid.

A scale of fees, costs, etc., which must be paid by applicants in advance is to be determined. For the immediate working of the Act an appropriation of $ 50,000 is to be taken from the Consolidated Revenue Fund of the province, the same to be repaid later.

This Act became operative on April 26, 1916.

FRANCE.

THE WORKING OF CREDIT ON REAL ESTATE NEAR THE FRONT. — *Bulletin de l'Union Centrale des Syndicats des Agriculteurs de France.* July-August, 1916.

In virtue of the law of 10 April 1908, which facilitates the acquisition of small holdings by workmen in the towns and the country, the Societies for Credit on Real Estate receive advances from the State at 2 % and lend (on the guarantee of a mortgage and a life insurance) to persons of small means four fifths of what they need in order to acquire or build a healthy house, or to acquire a field or garden of one hectare, of the maximum value of 1,200 francs, which they engage themselves to cultivate.

The Society for Credit on Real Estate of Saint Omer (Pas-de-Calais) was one of the first, in date and in importance, to be founded with a view to the application of this law. In spite of the exceptional circumstances of the present time — in spite of the mobilisation of many of those to whom loans have been conceded — the Society obtained in 1915 encouraging results, which show incidentally with what confidence the future is envisaged in this district so little distant from the front.

The total sum paid by those who had borrowed on mortgages reached

11,988.25 francs in 1914; in 1915 it rose to 16,998.85 francs — an increase of 5,000.60 francs.

Only seven debtors out of eighty-three have paid nothing during the year; and of these seven there are two whose houses are not finished.

For such of the borrowers from the Society as have been killed by the enemy the *Caisse Nationale d'Assurances* has paid the amount of the insured sums as soon as it has received adequate documentary evidence as to the case. The Society for Credit on Real Estate received under this head 804.65 francs from the one source and 3,468.20 francs from the other.

Since its foundation the Society has realized 83 loans, amounting to 312,162.70 francs.

HUNGARY.

MORTGAGE ESTABLISHMENTS IN HUNGARY IN 1915. VAN ROYEN (H. J. B.) *Pester Lloyd.* Budapest.

In spite of the war the results obtained in the past year by the Hungarian mortgage establishments have not been bad. They have even been better than in 1914.

The State having brought the investment market largely under contribution, in order to meet the costs of the war, the sale of mortgage securities and of bonds bearing a somewhat low rate of interest has naturally been difficult, and this in itself explains the calm aspect of mortgage transactions in 1914. A check must for that matter have been received in the previous year, the demand for credit having almost entirely ceased. Although the hopes which were founded last spring on the harvest were not realized, the unheard of rise in the price of the products of the soil was found to be so advantageous to the great landed proprietors and the peasants, that not only was the need for agricultural credit not felt, but it became possible to repay debts and a respectable sum was received by the bank in deposits. Further the division of landed property and the trade in real estate have been almost entirely interrupted by the war: consequently there have not been the calls on credit which these transactions usually necessitate.

The stagnation of business as regards building enterprise has not been modified, for the scarcity of labour and its sensible increase in cost do not allow new building to be undertaken.

In spite of the fact that, at the petition of the building contractors and the tile factories, the Hungarian government agreed at the beginning of the year with the mortgage establishments of the capital, that, in order to aid this branch of business, a loan on mortgage of 50 million crowns would be placed at its disposition, no such transaction was in fact effected.

Consequently the activities of most of the mortgage institutions were limited to the liquidation of loans previously conceded, and, in some cases,

to the conversion of loans on securities and on current accounts into mortgage loans.

Since, with several exceptions, the Hungarian mortgage establishments are mixed financial institutions which discharge all the activities of banks, it goes without saying that the profound influence exercised by the war on the national economy has had a strong reaction on current financial operations. The exceptions alluded to are : the Hungarian Institute for Land Credit (*Ungarisches Bodenkreditinstitut*), the Provincial Institute for Land Credit for Small Land-owners (*Landes - Bodenkreditinstitut für Kleingrundbesitzer*), the Hungarian Mortgage Bank (*Ungarische Hypothekenbank*), the Central Mortgage Bank of Hungarian Savings Banks Joint Stock Society in Buda-Pesth (Zentralhypothekenbank Ungarischer Sparkassen A. G. in Budapest), and the Mortgage Establishment of Transylvanian Savings Banks in Medgyes (Pfandbriefanstalt Siebenburgischer Sparkassen in Medgyes).

The enormous realization in paper money of products traded in and work accomplished, as well as the rarity of cases in which credit has been granted, have resulted in an extraordinary increase of cash throughout the country. In all the banks investments have increased while the circulation of stocks has diminished.

In order to allow the pronouncement of an opinion as to the influence which these combinations of circumstances have had, in modifying the results obtained in the previous year by the mortgage establishments, the author gives the balance-sheet of the 14 institutions of Buda-Pesth, the 10 establishments in the Hungarian province (1) and the 4 institutions of Croatia which have the right to issue mortgage securities and bonds.

The recapitulation of the results obtained by the institutions of Buda-Pesth leads to the statement that the total amount of mortgage loans, municipal loans and similar transactions, with the stocks which serve as guarantee for issues of loans, was 3,455.52 million crowns at the end of 1915, as against 3,506.44 and 3,475.73 million crowns in 1914 and in 1913. The circulation of mortgage securities, municipal bonds, bonds on lots, titles to rents and railway bonds, as well as titles to mortgage funds, covered 3,426.92 million crowns as against 3,461.24 and 3,414.25 million in 1914 and in 1913.

Of these titles issued there remain in the portfolios of these establishments those not negotiated before the end of the year, to the value of 80,294,816 crowns. This sum is less by 16.22 million crowns than the corresponding figure for 1914 and by 24.68 million than that for 1913. In 1916 a recovery of interest in the demand for mortgage securities and bonds can already be noticed.

The total sum of arrears of annuities for the mortgage loans and the municipal loans has, naturally, slightly increased since the war : that is by 6.99 million crowns in 1914 and by 4.28 million in 1915. Nevertheless

(1) One of the establishments has not yet produced its balance-sheet.

and for divers reasons the collection of these arrears when circumstances shall again have become normal can be counted on with sufficient certainty.

There is the further point to be remarked in these results that the sum of the loans on securities and on current accounts has notably increased in 1914 and in 1915. This increase reached 17.89 million crowns in 1914, and 11.46 million in 1915, so that at the end of 1915 the total amount of loans on security and on current accounts was 77.77 million crowns. The reason for this is that the financial establishments thought it better in the existent conditions thus to insure for their clients a credit cheaper than mortgage credit.

The total amount of reserve funds set aside to guarantee mortgage securities and bonds issued, of guarantee funds called upon to answer for the borrowers, and of funds set aside to insure the service of liquidations, reached, at the end of 1915, 218,454,542 crowns or more than 6 % of the titles issued for circulation.

The recapitulation of the balance sheets of the nine provincial establishments and the four Croatian institutions leads to the conclusion, that the results of 1915 have not been bad. The amount of the loans in suspense and, relatively to them, that of mortgage securities and municipal bonds in circulation, have suffered only a moderate fall. While in the Hungarian establishments the short-dated passive investments, and the active investments which are easily realized, have remained almost stationary, the balance-sheet of the Croatian institutions shows a sufficiently distinct increase of investments. The latter figure as 28 million crowns and constitute a proof, whatever the cause, that economic life follows a normal course.

To sum up, those mortgage establishments, of which we have mentioned the balance-sheets, had, at the end of 1915, mortgage securities and bonds in circulation to the value of 3,812.45 millions crowns, as against 3,852.04 and 3,793.34 million crowns in 1914 and 1913. On the other hand they were creditors for mortgage loans, municipal and other, and were in possession of stocks, to a total value of 3,902.94 million crowns, as guarantee of their issues. In 1914 this figure was one of 3,965.35 million crowns, in 1913 it was 3,932.32 million crowns.

Part IV: Agricultural Economy in General

FRANCE.

THE AVERAGE WAGES OF AGRICULTURAL LABOURERS.

SOURCE :

MODERN INSURANCE. — Paris, 30 June 1916.

A decree regulating administration, of 24 May 1915, applying the law of 15 July 1914, by which the provisions of the law of 9 April 1898 as to accidents in the course of work were extended to forestry, has established the conditions in which, in each department, the average wages of agricultural labourers are fixed. On the basis of this average wage the indemnities due to workmen injured while engaged in forestry, or to their assigns, are calculated, when the injured man is not paid by the head of the business or does not receive a fixed wage.

In view of the application of the law, which was to come into force on 1 September 1915, such calculation was made for each department by the *préfet*, after he had taken the advice of the mixed commissions of which the constitution is fixed by the first article of the decree, and after an administrative enquiry in the course of which all pertinent information was collected from the syndicates of employers and workmen, from the director of the agricultural services and from other competent persons.

The sub-joined table shows, by departments, the fixing of the average wage from the agricultural wages, in view of the application of the said law of 1914. The figures in italics indicate wages fixed temporarily.

Departments	Average wage		Observations
	Daily	Annual	
Ain		1,200	
Aisne		1,275	
Allier	3.55.	1,100	
Alpes (Basses-)	*2.50* in winter; *5* f. in summer	—	
Alpes (Hautes-)	*4.50*.	—	
Alpes-Maritimes	3.50 in summer; 3 f. in winter	—	Summer: 15 March to 15 Oct. – Winter: 15 Oct. to 15 March.
Ardèche	*3* f.	—	
Ariège	3.75.	1,125	In a year of 300 days.
Aube	4.50.	1,350	
Aude	1 Nov. to 31 Jan.: *3* f.	—	The women's wages are egual to half those provided for agricultural labourers.
	1 Feb. to 31 Oct.: *4* f. and 2 litres of wine.	—	
	Harvest-time: 5 f, et 3 litres of wine	—	

		Wage		Working hours		Observations
		Winter	Summer	Winter	Summer	
Aveyron	Wood-cutters	*3* to *5*	*5* to *6.50*	6 to 8	10 to 11	The working hours do not include those occupied by rest and necessary to meals. Wood-cutters who make fagots by the piece are paid at the rate of 4 to 6 f. for a hundred fagots. When workmen are fed their pay is less by 1.50 a day.
	Sawyers	*5* to *6.50*	*6* to *7.50*	7 to 8	do.	
	Charcoal-burners	*4.50* to *6*	*6* to *7.50*	6 to 8	do.	

Bouches-du-Rhône	Charcoal-burners	—	Monthly wage: 200 fr. Piece work, not fed.
	Woodcutters (including fagot-makers)	6 —	1,400
	Women fagot-makers	2.80	700 — 125 fr. Piece work, not fed or lodged.
	Boy milkers (not lodged or fed)	2.25	780 — 60 fr.
	Forester carters	lodg.fed.	1,000 — 80 fr., not fed or lodged.
	Shepherds		685 — 80 fr., lodged and fed.
	Young shepherds		450 — 60 fr., lodged and fed.
	Gardeners	4.25	1,140 — Fed and lodged.
	Journeymen agricultural labourers	3.50	— — 120 fr., not lodged or fed.
	Farm servants		600 — 91 fr.
	Carters		720 — 50 fr., fed and lodged.
Calvados	*4* f. in time of peace; *4.75* in time of war		— — 55 fr., fed and lodged.
Cantal			1,050
Charente	3 fr.		—
Charente-Inférieure	*2.50* for the winter; *3* f. for the summer		—
Cher	*4.45*.		1,620 — In a year of 365 days.
Corrèze	*3.75*.		— — Food included (valued at 1 fr. 25).

Departments	Average wage		Observations
	Daily	Annual	
Corse	3 fr.	—	
Côte-d'Or	4 fr. for men; 2.50 for women.	—	
	Winter — Summer —		
Côtes-du-Nord	Agricultural labourers men 2.50 3 —	—	
	» » women 2 — 2.50	—	
	Agricultural labourers (special work):		
	Harvest 4 —		
	Hay-harvest 3 —	—	
	Farm servant (men)	350	With food, lodging and washing.
	» » (women)	200	Idem.
	Young farm servants (less than 15 years old, both sexes)	100	Idem.
	Gardeners winter, 3 f.; summer 3.50.	—	
	Fed — Not fed —		
Creuse	Men 2.50 4 —	—	The winter months may be taken to equal about $^{7}/_{12}$ of the summer months.
	Women 1.40 2.20	—	
	Children 0.75 1 —	—	
Dordogne	4 fr.	—	Not fed.
Doubs	4 fr.	—	Wages and food.
Drôme	In winter 1.50 2.50	—	
	Spring, autumn 2 to 2.50 3.50	—	
	Hay harvest, harvest, and threshing 4 to 5 f. 5 to 6 f.	—	
Eure	3.20.	—	
Eure-et-Loir	4 fr.	—	
Finistère	3.25.	—	
Gard	5 fr.	—	
Garonne (Haute-)	3.50.	875	In a year of 250 days.
Gers	Farm servants	450	Fed.
	Journeymen farm labourers 2.50	—	Not fed.
			No forests are cultivated in the department. The agricultural labourers are employed during the winter days for the work in the woods.
Gironde	5 fr.	—	
Hérault	4 fr.	—	Eight-hour day.
Ille-et-Vilaine	3.65.	—	
Indre	4 fr. (May, June, July, August, September); 3.50 (March, April, October, November); 3 fr. December, January, February)	—	

Departments	Average wage		Observations
	Daily	Annual	
Indre-et-Loire . .	Summer-time (1 March to 1 November):		
	3.25 with food; 4.75 without food.	—	
	Winter-time (1 November to 1 March):		
	2.25 with food; 3.50 without food .	—	
Isère	3.60.	—	
Jura.	4 fr.	—	
Landes.	3.15.	800	Plus certain advantages such as lodging, garden, etc.
Loir-et-Cher . . .	3.40.	—	
Loire	4.50.	—	
Loire (Haute-) . .	3.75.	—	
Loire-Inférieure .	3.65.	1,095	300 working days in the year.
Loiret , ...	Region of Beauce:		
	Journeymen workmen 3.30	—	All in receipt of wages are fed by the employer.
	Master carters	975	
	Second »	875	
	Third »	775	
	Shepherds	900	
	Cowmen	900	
	Servants	450	
	Gardeners.	1,000	
	Region of Gâtinais:		
	Journeymen workmen 3.50	—	Idem.
	Master carters	975	
	Second »	875	
	Third »	775	
	Shepherds	850	
	Cowmen	800	
	Women servants	450	
	Gardeners.	1,000	
	Region of the Valley of the Loire:		
	Journeymen workmen	—	Idem.
	Master carters	900	
	Second »	800	
	Third »	700	
	Shepherds	850	
	Cowmen	850	
	Women servants	450	
	Gardeners.	1,150	
	Region of La Puisaye:		
	Journeymen workmen . . . . 3 —	—	Idem.
	Master carters	750	
	Second »	600	
	Third »	550	
	Shepherds	550	

Departments	Monthly wage		Observations
	Daily	Annual	
Loiret (continued)	Cowmen	600	
	Women Servants	400	
	Gardeners	1,100	
	Region of La Sologne:		
	Journeymen workmen	—	All receiving wages are fed by the employer.
	Master carters	750	
	Second »	600	
	Third »	550	
	Shepherds	550	
	Cowmen	500	
	Women Servants	400	
	Gardeners	1,080	
Lot		1,000	For men over 18.
		730	For men under 18.
		730	For women.
Lot-et-Garonne		900	For men.
		550	For women.
Lozère	*3* fr.	—	
Maine-et-Loire	*3.50*	—	
Manche	*3* fr.	—	
Marne	Woodmen *4*—	—	
	Assistant woodmen *2.75*	—	
	Loppers *8*—	—	
	Charcoal-burners *5*—	—	
	Assistant charcoal-burners *3*—	—	
	Sawyers and sawmill workmen *5*—	—	
	Splitters *5*—	—	
	Workmen *4*—	—	
Haute-Marne	Men 3.25	—	
	Women 1.75	—	
	Lads 1.75	—	
Mayenne	*3.50*	—	
Meurthe-et-Moselle	Men 3.75	—	
	Women 2.75	—	
	Boys under 18 2.50	—	
	Girls » » 2—	—	
Meuse	Men 3.50	—	
	Women 1.75	—	
Morbihan		*825*	
Nièvre	*5* fr.	—	
Nord	*3.40*	*1,050.60*	In a year of 309 working days.
Oise	4 fr.	—	
Orne	Summer: *3.75*; winter: *2.50*	—	Without food.
Pas-de-Calais		*1,000*	
Puy-de-Dôme		1,000	

Departments	Average wage		Observations
	Daily	Annual	
Pyrénées (Basses-)	2.50.	—	Without food.
Pyrénées (Hautes-)	3 fr.	—	
Pyrénées-Oriental.	. . . . .	1,200	In a year of 300 days.
Rhin (Haut-), Belfort	4.50.	1,600	

Rhône . . . . .

		Form of wage		Normal wage		
		Near the centres	In the rest of the depart.	Near the centres	In the rest of the department	
Journeymen workmen	Men	By the hour	By the whole day	0.40 to 0.50 the hour	Mountain zone Summer: 2.50 to 4 Winter: 2 to 2.50 with food — Vineyard Summer: 2 to 5 plus 2 litres of wine Winter: 3 to 4 plus wine	Working hours near the great centres and vineyards. – Summer 12 hours; spring and autumn 10 hours; winter 8 hours. Working hours in mountain zone — from sunrise to sunset.
	Women	Idem .	Idem .	0.25 to 0.30 the hour		

Servants men	under 20	150 to 250	Fed and lodged.
» »	over 20	300 to 500	
» women	under 20	150 to 200	
» »	over 20	200 to 350	

Saône (Haute) . .	Men	5—	—
	Women	3—	—
	Boy from 13 to 18.	3—	—
	Girls from 15 to 18	2.25	—
Saône-et-Loire . .	3.50		—
Sarthe	Summer: 3.75 (without food) . . .		—
	Winser: 2.50 (without food). . . .		—
Savoie	4 fr.		—
Savoie (Haute). .	3.50		—
Seine	No private forest cultivation in the department.		For one average day of ten hours.

		Winter	Summer	
Seine-Inférieure .	Men.	3.10	3.50	—
	Women, old men (over 55) and apprentices between (14 and 17)	2.25	2.50	—

Departments	Average wage					Observations
	Daily				Annual	
Seine-et-Marne	4.50.				—	
Seine-et-Oise	*4* fr.				—	
Sèvres (Deux-)	Men: *4* fr ; women: *1.50*				—	Plus food.
Somme	*3.25*.				—	
Tarn	Men.				1,050	Representing 300 working days at 3.50 fr. the day
	Women.				750	Idem . . . . 2 fr. 35
	Agricult. labourers	Spring	Summer	Autumn	Winter	
Tarn-et-Garonne	Region of La Lomagne	3.50	5 —	2.50	2 —	
	La Vallée	2.75	3.50	2.25	2 —	
	Region of Quercy	2.75	3.50	2.25	2 —	
Var	4.50.				—	
Vaucluse					*960* to *1,080*	Without lodging or food.
					600	Lodged and fed.
Vendée	2.50.				—	
Vienne	*4* fr				—	
Vienne (Haute-)	No forest in private ownership in the department. The wood felled in the common forests is delivered to those having common rights who make their own profit of it without use of paid employes coming under the law of 9 April 1908.					
Vosges					*1,200*	
Yonne					1,200	In normal times.
					1,350	For the duration of hostilities.

ITALY.

ITALIAN FOREST POLICY AND THE RESULTS OBTAINED IN RELATION TO THE CONSERVATION AND RESTORATION OF FORESTS

SOURCES:

MINISTERO DI AGRICOLTURA, INDUSTRIA E COMMERCIO, DIREZIONE GENERALE DELLE FORESTE (*Ministry of Agriculture, Industry and Commerce. General Direction of Forests*). *Report on the State Domanial Forest Department* 1 July 1910-30 June 1914. Rome, Stabilimento Flli. Capaccini, 1915, p. 381.

LEGGE 2 GIUGNO 1910, N. 277, RIGUARDANTE I PROVVEDIMENTI PER IL DEMANIO FORESTALE DI STATO E PER LA TUTELA E L'INCORAGGIAMENTO DELLA SILVICULTURA. (*Law of 2 June 1910, No. 277, containing provisions for the State forest domain and for protecting and promoting sylviculture*). (Gazetta ufficiale of 8 June 1910, No 134).

LEGGE 3 MARZO 1912, N. 134, CHE STABILISCE I RUOLI ORGANICI DEL PERSONALE DEL CORPO REALE DELLE FORESTE. (*Law of 3 March 1912, No. 134, establishing the personnel of officers of the Royal Forestry Corps*). (Gazetta ufficiale of the 13th March 1912, No. 62).

REGIO DECRETO 21 MARZO 1912, n. 442, CHE APPROVA IL TESTO UNICO DELLE DISPOSIZIONI DI LEGGE PER LA SISTEMAZIONE IDRAULICO-FORESTALE DEI BACINI MONTANI. (*Royal Decree of 21 March 1912, No. 442, approving the consolidated text of the enactments for hydraulic and forest regulation of mountain catchment areas*). Gazzetta ufficiale of 25 May 1912, No. 124.

LEGGE 16 GIUGNO 1912, n. 582, CHE PROVVEDE ALLA CORREZIONE DI UN ERRORE MATERIALE NELLA LEGGE 3 MARZO 1912, N. 134, SUL RUOLO DEL CORPO REALE DELLE FORESTE. (*Law of 16 June 1912, No. 582, providing for correction of a material error in the law of 3 March 1912, No. 134, on the personnel of the Royal Forestry Corps*). (Gazzetta ufficiale of 20 June 1912, No. 145).

LEGGE 14 LUGLIO 1912, NO. 834, CONCERNENTE PROVVEDIMENTI PER L'ISTRUZIONE FORESTALE. (*Law of 14 July 1912, No. 834, containing provisions for instruction in forestry*). (Gazzetta ufficiale of 8 August 1912, No. 187).

REGIO DECRETO 5 AGOSTO 1912, NO. 944, CHE APPROVA IL REGOLAMENTO PER L'ESECUZIONE DELLE LEGGI 3 MARZO 1912, N. 124, E 16 GIUGNO 1912, N. 582, CHE STABILISCONO I RUOLI ORGANICI DEL CORPO REALE DELLE FORESTE. (*Royal Decree of 5 August 1912, No. 944, approving the regulations for execution of the laws of 3 March 1912, No. 124, and 16 June 1912, No. 582 establishing the personnel of the Royal Forestry Corps*). (Gazzetta ufficiale of 12 September 1912, No. 216).

LEGGI SPECIALI A FAVORE DELLA SARDEGNA, CALABRIA E BASILICATA. (*Special laws in favour of Sardinia Calabria and Basilicata*).

LEGGI: 22 MARZO 1900, n. 195, PER IL RIMBOSCHIMENTO ED IL RINSODAMENTO DEI BACINI MONTANI E DELLE DUNE; (*Laws: 22 March 1900, No. 195 for the re-afforestation and re-consolidation of mountain basins and dunes*);

13 APRILE 1911, n. 311, RECANTE PROVVEDIMENTI PER DANNI RECATI DA ALLUVIONI, FRANE E MAREGGIATE; (*13 April 1911, No. 311, containing provisions in relation to damage caused by alluvial action, land-slides and tidal waves*;

19 LUGLIO 1906, N. 390, RECANTE PROVVEDIMENTI A FAVORE DEI DANNEGGIATI DALLA ERUZIONE DEL VESUVIO, ecc. ecc. (19 *July* 1906 *No.* 390, *containing provisions in favour of the sufferers by the eruption of Vesuvius. etc. etc.*).

The General Director of forests, Prof. ANTONIO SANSONE, has recently published a lengthy report on the state forest-domains for the period 1 July 1910 to 30 June 1914.

This report, amply provided with details, statistical information, illustrations and topographical maps, conveys a clear idea of the economy of the state forest domains, and furnishes particulars on the one hand of the reafforestation work accomplished, and on the other of the difficulties which have occurred and still occur in carrying into effect an extensive forest restoration.

The work in question acquires still greater importance by reason of the fact that it contains a retrospective survey of what was accomplished in Italy in the forestry department before 1910, from the time of the first legislative provisions on this matter.

We avail ourselves extensively here of the report of Prof. Sansone, for the purpose of examining and setting out the practical results of the application of Italian forestry legislation in general and that of 1910 and 1912 in particular.

§ 1. GENERAL SURVEY OF ITALIAN FOREST LEGISLATION IN 1910 AND 1912.

The law of 2 June 1910, No. 277, " making provision for the forest domain and for safeguarding and promoting sylviculture ", inaugurates the new period of Italian forest policy.

One of the most important enactments of this law is certainly that relating to the autonomy of the forestry department, which is made independent of the general law of State accounts, and given its own balance sheet, and which is therefore enabled to develop its work for the conservation and the increase of the public forest patrimony freely and in accordance with industrial criteria. The department is made up of a "general direction", a " superior council of waters and forests " and a " Royal Forestry Corps ".

We shall not enter into a detailed examination of the provisions of this law, this review having already had occasion to deal with it at length in numbers 7 and 8 for 1911. It is as well, however, in order to facilitate examination of the work of the State forestry department in the period 1 July 1910 to 30 June 1914, to recall that in pursuance of article 10 of the law in question, the State forest domain is made up of the following :

(*a*) The domanial forests already declared inalienable ;

(*b*) the domanial forests administered by the minister of finance at the time of passing the law ;

(*c*) the lands of the State patrimony regarded as being economically capable only of forest cultivation ;

(*d*) the wooded lands acquired by the forest domain department or otherwise ;

(*e*) the lands not covered with forest, acquired or expropriated by the forest domain department ;

(*f*) the land re-afforested or to be re-afforested by the Ministry of Public Works, in execution of special or general laws on hydraulic and forest construction and on the regulation of mountain catchment areas, which land the ministry of agriculture, industry and commerce had thought fit to incorporate in the forest domain.

The law of 1910, which definitely accepted, developed and generalized those tendencies of forest policy manifested in the special legislation in favour of Basilicata, Calabria and Sardinia, may be viewed as the basis of Italian forest reform. It is wholly and solely a forestry law, inasmuch as by three categories of fundamental provisions (constituting the State forest domain, encouraging sylviculture, and conserving forests) it seeks to maintain the wooded areas of the country and to enlarge and improve them. This character of the law of 1910, which emerges clearly from all its provisions and its parliamentary antecedents, is likewise acknowledged by the report which accompanies the bill " amending the law of 20 June 1877 and providing for mountain pasturage and agriculture ". The law of 2 June 1910 No. 277, marks the beginning of an entire series, not yet completed, of measures for the restoration of mountainous wooded areas, and radical reforms in forest administration. It is followed and supplemented by :

the laws of 3 March 1912, No. 134, and 16 June 1912, No. 582, on the *personnel* of the Royal Forestry Corps ;

the royal decree of 21 March 1912, No. 442 sanctioning the consolidated enactments for the hydraulic and forest equipment of mountain catchment areas ;

the law of 14 July 1912 No. 834 containing provisions for instruction in forestry ;

and the Royal decree of 5 August 1912. No. 944 approving the regulations for the execution of the laws of 3 March 1913 No. 124 and 16 June 1912 No. 582 establishing the personnel of the Royal Forestry Corps.

Of earlier forest legislation there remains the institution of the *re-afforestation associations*, constituted by the law of 20 June 1877 (article II), which, though with many variations, kept alive the tradition of forest cultivation until the time of the recent legislation, and which, when the law and the decrees of their constitution were faithfully adhered to, enabled their officers to grapple with the arduous problem of re-afforestation.

Truth to tell, however, the associations often performed work concerned with anything but forestry, which is perhaps the principal reason why the law of 1910 was preceded by so little preparation for afforestation, so that a long time must elapse before the statistics of annual re-afforestation attain to that respectable figure which is rightly required of them.

The enactments relating to the personnel or officers of the Royal Forestry Corps and those dealing with instruction in forestry mutually supplement each other, and have together been enforced to the extent allow-

ed by the difficulties of organizing a large staff and the shortness of time, and by the many new tasks entrusted to the administration of forest domains, which had to grapple with the thorny problem of carrying out the law of 21 March 1912 (for the hydraulic and forest organization of mountain catchment areas) as far as it was within the competency of the Ministry of Agriculture.

In this relation it is desirable to point out that the work of the Domains Department was perforce unable at once to proceed with the desired speed and furnish big results; the means available did not allow of satisfying all the large needs of the mountain areas, and it became necessary to enter upon a patient and difficult labour of selection, in order to decide on the works which admitted of no delay. When the perimeter of the basins selected had been determined, the procedure established by law for its approval had to be followed, in order that ultimately the plans might be drafted. In a matter so novel in Italy it was not easy to take the right bearings, and therefore thorough study and discussion of the fundamental standards with which this constructive work must comply is imperative. Nevertheless, in order to make the best use of time many detached schemes have been approved and even carried out.

It should here be remarked that the absence of regulations formed an obstacle to the voluntary assumption, by many provinces, of the direct execution of this hydraulic work, but it was really the question of the allocation of the work which created most difficulties and serious embarrassments in the framing of the regulations. The work being in most cases extensive, occupying several or even many years, and unquestionably liable to modification by reason of the natural and inevitable change of site in each year, it is very difficult if not impossible to prepare an accurate estimate on which the allocation may be based. In short, it is a question of allocating work which cannot be definitely specified, to be executed for a fixed sum at the risk of the contractor. It at once becomes apparent that the contractors may find themselves in great difficulties when the actual work exceeds the estimate, and that the system of adjudications or contracts contrived in order to expedite the execution, may give rise to great technical and administrative complications.

For all these and other reasons, the commission entrusted with the framing of the regulations must proceed with the utmost caution in handling the problem of adjudications or contracts.

There are many who fail to make proper allowance for these difficulties, thinking that the structural portion of the work should only consist in building for the diversion of torrents and protection of banks, and that the need for re-afforestation is either non-existent or very limited, so that this labour should be excluded or reduced to the lowest minimum.

The truth, on the contrary, is that this grave and difficult question does not admit of solution otherwise than by starting from the very source of the evil, that is, restoring the forest where it has been destroyed and where its disappearance has produced the evil effects deplored. It is certain that this cannot be done by means of very small patchwork re-afforesta-

tions, and by allowing temporary occupation of the lands under deforestation prohibitions of enhanced stringency. Such a method will hardly be welcomed by the mountain populations, both owing to the area involved and to the summary procedure practiced in imposing such prohibitions, together with the difficulty and tardiness with which re-afforestation will be accomplished, especially as temporary occupation of the lands is to obtain. On the other hand where the land is split up into small holdings, it is easy to imagine the fate awaiting these when, after re-afforestation, they must be returned to their owners with the obligation to preserve and cultivate the forest on pain of heavy fines.

For all these reasons it would seem desirable that the law on hydraulic and forest work should be co-ordinated with the other earlier law on forest domains, as it is obvious that if there be a really typical case in which the State should acquire the lands intended for re-afforestation and retain them in its own vigilant custody, with the restriction of inalienability, it is precisely the case in which such lands are situate within the perimeter of the mountain basins to be regulated.

Until such time, however, as the renewal of forest legislation by the law of 1910 can be completed by the approval of the bill prohibiting deforestation, and promoting mountain pasturage and agriculture, the Direction of the Superior Forestry Institute has been instructed to make all the necessary studies and surveys for the compilation of a register of lands which will be subject to the prohibition in certain mountain communes; a task which will be performed under diverse conditions according to the principles enunciated in the Bill. This is a labour of very great practical value, and one which, if carried out with a wide and rational comprehension of the great interests of the mountain regions, will certainly throw a broad light on the many and important questions connected with the above prohibition. Meantime it is sought to derive the greatest profit from the law of 1877 by giving to its provisions a less literal interpretation and one more in keeping with the objects at which it aims; this indeed is essential in so serious and thorny a matter, which entails limitations of the rights of ownership and which consequently compels a serious and attentive examination into the tangible public utility sought at the cost of private sacrifice.

§ 2. Forests and lands belonging to the State which have passed to the forest domain department.

By virtue of article 10 of the law of 2 June 1910, No. 277, the first nucleus of the Forest State domain was to be made up:

(*a*) of the forest domains already declared inalienable;

(*b*) of the forest domains administered by the minister of finance at the time of passing the law;

(*c*) of the lands belonging to the State which were deemed to be capable of forest cultivation alone, on an economic basis.

(*a*) On 30 June 1908 the area of inalienable forest domain declared such under the law of 20 June 1871, No. 283 (series 2ª) and 4 March 1886, No. 3713, and 28 June 1908, No. 376, was divided as follows :

Wooded area	Hectares	47,959.39
Arable area	»	4,982.44
Pasturage area	»	3,920.18
Waste land	»	2,555.33
Total in Hectares . . .		59,417.34

As a result of more exact surveys and rectifications of area, the woods already declared inalienable, administered by the ministry of agriculture, had, on 30 June 1910, the area of 53,959.95 hect.

(*b*). The enlargment of this domain was, under the law of 1910, to be contributed to by the ministry of finance, which should deliver to the forest department the woods which it possessed. In place however of genuine forests, there were handed over exceedingly small and widely scattered plots, covered wholly or in part with trees, and encumbered with rents and taxes so excessive as to form a heavy perpetual burden on the forest department, without the latter being able ever to secure, in reference to these lands, any of the advantages proposed by the law. On these bases there were handed over to the forest department lands of a total area of 7,424.56 hect., immediately after the approval of the law of 1910.

(*c*). The provisions under letter *c*) of the same article 10, by which State lands capable of sylviculture only were to pass to the forest department, was not accurately interpreted at the outset, as there were handed to that department very small areas, intended for field cultivation or for grazing, which had fallen to the State through failure to pay taxes, but which could not and cannot be considered economically capable only of forest cultivation as is provided in the article. Therefore, when the law came into force, there were handed over to the department under these conditions 42 estates of an aggregate area of 8,396.05 hectares, scattered through 25 communes. There were likewise transferred to the State Forest Department some lands already purchased for re-afforestation purposes by the associated forest committees, having a total area of 1,183.47 hect.

From the foregoing it results that on 30 June 1914 the area of land forming the State forest domain by reason of deliveries and transfers to the department was as follows :

(1)	Forest domains already inalienable	hect.	53,959.95
(2)	Forests administered by the Ministry of Finance	»	7,424.56
(3)	State lands capable of sylviculture only	»	8,396.05
(4)	Lands transferred by the re-afforestation associations	»	1,183.47
	Total . . .	hect.	70,964.03

§ 3. Estates acquired by the Forest Domain Department

With regard to new acquisitions we must state that the Forest Domain Department was determined to avoid acquiring wooded properties charged with easements, particularly of pasturage and wood gathering. It would have been a most happy circumstance if the communes had been induced to sell to the Department, not indeed forests and communal pasturage in good condition, but all those lands comprised within the spacious perimeters of mountain catchment areas, bare, derelict and deteriorated — which vainly await their redemption from the meagre communal finances; but generally the communal councils put almost insuperable difficulties in the way of the application of this beneficent law.

Up to the present no acquisition has taken place by expropriation proceeding from the Forest Domain Department. The law of 1910, both in substance and form, does indeed deprive the State almost completely of all power of expropriation with regard to the formation of the Forest Domain; as the department has the power to expropriate only *bare lands* to the exclusion of mountain pasturages and grasslands, and it would be no easy task to find even a limited area of bare land not adapted for pasturage. Nor again was power explicitly given to the Forest Domain Department to expropriate land re-afforested or to be re-afforested by the Ministry of Public Works under general and special laws for the hydraulic and forest organization of mountain basins. The law of 2 June 1910 gives powers to the Forest Department to incorporate such lands in the domain, but the law of 1911 in the most categorical and absolute way precludes all power of expropriating these lands, and adopts as a general principle the granting of temporary occupation alone. Yet, if there is one absolute and indisputable necessity in connection with the formation of the Forest Department, it is that the possession of lands lying within the boundaries of the mountain catchment areas should be regulated.

It is as well to note however that expropriation, though it might in some exceptional cases be of great assistance, would be injurious if applied as a general rule in the matter of acquisitions. It would be a dangerous thing to attempt to constitute the bulk of the State Forest Domain by expropriation. Apart from difficulties of procedure, the State would undoubtedly pay four of five times the value of the properties. Whatever the method of expropriation, the assessment of compensation is always influenced by the sense of a violation of the liberty of others, which is more or less marked according to the case and to the circumstances. Free contract therefore should be the general rule in acquisitions by the domain.

These considerations being premised with regard to the bases of the activity of the Forest Department in increasing the Forest Domain, we merely note that in the period 1 July 1910 — 30 June 1914 the department

in question acquired in due form 17 properties of an aggregate area of 24,755.47 hect.

For other 13 properties of the aggregate area of 8,354.91 hect. an agreement as to their price and the resolution to purchase them have already been made by the directing Board of the department, but the contract of sale has not been executed pending fulfilment of all the formalities required.

§ 4. Administration of the inalienable forest domain.

The law of 20 June 1910, No. 277, entrusting to the Forest Department 23 inalienable domanial woods of an area of 51,899.59 hect., confirmed the old intention of the legislators, that such forests should form the nucleus of a vaster State forest property and should be cultivated and utilized on a regular economic plan, so as to furnish an example of a good industrial system of forest property and provide for the growth of sylviculture and national forest production.

In some of the principal forests, as for instance those of Boscolungo, Camaldoli and Vallombrosa, it was necessary, in the first place, to put in hand speedily the utilization of ripe and over-ripe wood, abandoned in climatic resorts in pursuance of the law of 29 December 1901, No. 535; as otherwise these forests would gradually decay and be destroyed.

In the forests possessing cultivations and pasturages, it was essential before considering a use which would have hastened destruction, to enter upon a most difficult and insidious struggle with those who might be regarded as the genuine feudal holders of some of the inalienable forest domains. Thus for instance the forest of Gallipoli Cognato, covering fully 4000 hectares, was finally cleared of the pasturage of 2500 animals and divided into various sections, in each of which the ripe and decaying growths are being cut down, while at the same time all the brushwood and underwood broken down by the continuous pasturage is being removed. The artificial re-afforestation of all the parcels previously under cultivation is likewise being carried out.

The complete fulfilment of the programme described will enable the Department to restore the forest without heavy expenditure and perhaps with some financial benefit, because in the period necessary to such restoration the loss of the rent for pasturage and cultivation will be fully counterbalanced by the proceeds from the felling of the mature and over-mature wood. Felling and pasturage can then be gradually resumed, the latter certainly under better conditions.

In almost all the forests administered by the Forest Domain Department it was endeavoured, in accordance with the above principles, to utilize on the largest scale the mature and over-mature trees.

Consequently during the last few years there has been a notable in-

crease in the gross receipts from the sale of the wood, as appears from the following figures :

Average	1900-1910	Lire	393,126.37
Working year	1910-1911	»	828,891.94
»	1911-1912	»	794,038.80
»	1912-1913	»	951,273.97
»	1913-1914	»	1,133,860.00

In general, the administration has taken every care in carrying out the utilization and the sales, and has endeavoured to secure the greatest benefit from the property entrusted to it, and all this has led to a marked increase in the gross receipts from the utilization of the products of the soil (pasturage, grass, hay, rent of land for sowing etc.) and the wood-fellings, as shown by the following figures :

			Gross Receipts
Average	1900-1910	Lire	607,596.09
Working year	1910-1911	»	1,008,680.06
»	1911-1912	»	985,905.26
»	1912-1193	»	1,141,812.37
»	1913-1914	»	1,296,683.25

If we consider only the forests industry of the department in 1910, we will be wise not to make too hasty deductions from these figures. It is easy to foresee that for several years more considerable revenues will be obtained by the utilization of extensive accumulated capital which if abandoned would certainly have been lost ; but when, after this transitory period, normal conditions return, only the normal product and ordinary yield will be obtained in forests which are in a good condition, while in the others little or no profit will be made, because, when the old trees and the pasturage have been taken away, the forest must be given all the necessary time for fresh growth.

Though less than the receipts, the costs of ordinary management have increased *pari passu* with them. They have been :

Average	1900-1910	Lire	376,641.63
Working year	1910-1911	»	449,162.13
»	1911-1912	»	511,090.35
»	1912-1913	»	536,231.73
»	1913-1914	»	475,190.00

The expenses for improvements in general, and particularly for new constructions and re-afforestation, were almost negligibie in the period 1900-1910, being only 26,872 L. for structural works and 26,035 L. for re-afforestation.

In the period 1910-1914 the expenses in this branch greatly increased, being :

		Structural work	Re-afforestation
Working year	1910-1911 . . .	Lire 103,742	Lire 39,692
»	1911-1912 . . .	» 39,754	» 37,908
»	1912-1913 . . .	» 24,032	» 13,648
»	1913-1914 . . .	» 42,003	» 77,278

* * *

On the administration of the forests and lands derived from the Ministry of Finance there is little to be said, as they have only recently passed to the Forest Department. On the other hand, as they are not genuine forests but brushwood, underwood and pasturage of very limited area, the work of restoration is very difficult and expensive.

Similarly very little could be done for the forests and lands acquired very recently by the Forest Department. A period of general reorganization and consideration is essential. With the abolition of pasturage, however, the principal cause of damage and deterioration has been done away with; and the spontaneous regrowth of the forests assisted.

(*To be continued*).

MISCELLANEOUS INFORMATION RELATING TO AGRICULTURAL ECONOMY IN GENERAL.

ARGENTINA.

A LAW FOR THE ENCOURAGEMENT OF THE DAIRY INDUSTRY. — Revista de la Sociedad Rural de Cordoba. XVth Year, No. 311-312. Cordova. Nov.-December 1915.

Argentina, so rich from the point of view of stock rearing, has up to the present hardly concerned itself with the dairy industry, which is still in its initial stage. The need to develop this form of activity, which may represent a source of wealth to the nation, is beginning to make itself felt however, and a law recently passed by the Parliament of the Province of Cordova attests the desire of Argentine official circles to direct the efforts of the agricultural population with vigour towards this object.

This law, which is dated the 31st August 1915, was supplemented by regulations dated the 18th December of the same year. Its chief object is to grant tax exemptions to butter and cheese factories.

It provides that all rural establishements of the nature of dairies, butter factories, casein or cheese factories, and others turning out dairy products, shall be free from taxation for a period of ten years. This exemption comprises the taxes on : (*a*) landed property, or the portion of it devoted exclusively to production of the above products ; (*b*) the sale of the products throughout the province ; (*c*) the machinery, tools and other articles forming the plant ; (*d*) the licences of brokers and agents engaging exclusively in the sale and the centralization of these products.

Exonerated from treasury charges likewise are business houses devoting themselves exclusively to the sale of implements utilizable by the dairy industry.

In order to benefit by the advantages conferred by this law, those concerned must hand in to the Ministry of Finance an application stating : (1) the site and class of the establishment ; (2) the nature and amount of tax paid until then ; (3) the area and description of the real property intended for the dairy industry, the nature of the fields and pasturages, the number of cows and the corresponding sales establishments ; (4) a description of the factory, the buildings, machinery and tools for manipulating the milk; (5) the area of fields annexed to the factory, for the use of the latter and utilization of by-products in the form of casein, cattle rearing, pig and poultry feeding, etc. ; (6) the number of vehicles and cartage facilities at the disposal

of the establishment ; (7) the number of brokers, agents, branches or business houses engaging exclusively in the sale or collection of the dairy products, etc. Each of the applications thus made will be examined by the local receiver of taxes and an inspector of the treasury appointed for that purpose, and it will be complied with after an inspection on the spot has demonstrated the truth of the statements therein contained.

The dairy establishments will cease to enjoy the privileged treatment indicated above if they are used for other purposes or if their operations are suspended for more than five months.

During the period of exemption they of course remain subject to supervision of the treasury agents, who have the right to enter them as often as they desire and require such information as they may think needful.

These measures, which are particularly favourable to the development of the dairy industry in the province of Cordova, will enable the latter to increase the output of products so as to avoid resort to importation from other provinces and abroad and to export in its turn the butter and cheese made within its territory.

COSTA RICA

A LAW FOR PROMOTING WHEAT-GROWING. — *La Gaceta*, Diario Oficial, XXVIIth Year, No. 56. San José de Costa Rica, September 3, 1915.

Reference has already been made in this Review (1) to the reaction of the European war on public credit in some countries of Latin America, especially Costa Rica. The fact of agricultural and industrial development being incomplete or in its infancy in some of these countries increased the difficulty of surmounting the crisis, and the need to import products of primary necessity added still further to the want of balance between incomings and outgoings.

With a view evidently to rectifying this position to some extent the Congress of Costa Rica on the 20th August 1915 passed a law for the promotion of wheat-growing throughout the country, granting premiums to growers of this cereal and establishing a protective duty on imported wheat.

The law provides that farmers cultivating at least seventy hectares of land under wheat and devoting all their care to this cultivation from sowing to harvesting shall be entitled to a premium of a hundred colons from the Treasury. This premium however will only be paid to each farmer for his trial cultivation, so that one and the same person carrying out cultivation work at different times or on different estates in his own name or in the name of members of his family or his dependents, will only be able

(1) See "International Review of Agricultural Economics", VIth Year, No. 9. September 1915.

to receive one hundred colons. Furthermore, the properties on which the premium has accrued shall not be able to give the right to further premiums if they pass into other hands.

Immediately after sowing, the farmer who fulfils the desired conditions must claim the premium from the Secretariat of National Economy. This Department will have inspection made of the fields of the farmer in question through its officers or local political authorities, in order to make sure that cultivation has been done in a rational way and with all the care needed for a good crop. If the result of the inspection is satisfactory the premium will be paid to the producer within one month at most after the harvest.

The law will cease to be operative at the end of the year in any province where the applications for the premium have amounted to fifty.

FRANCE.

AGRICULTURAL TRAINING FOR MEN INJURED IN THE WAR. — *La main-d'œuvre agricole*, Paris, August 1916.

The Ministry of Agriculture has organized a special service for the agricultural training of men injured in the war. Twenty-tree training centres have been opened, namely the National School of Agriculture of Grignon (Seine-et-Oise), the National School of Horticulture of Versailles; the schools of dairy-work or cheese-making at Mamirolle (Doubs), at Poligny (Jura) and at Surgères (Charente-Inférieure); the school of basket-making at Fayl-Billot (Haute-Marne) ; the shepherds' school at Rambouillet (Seine -et-Oise) ; the Practical Schools of Agriculture at Fontaines (Saône-et-Loire), Ondes (Haute-Garonne), Aurillac (Cantal), Châtillon-sur-Seine (Côte-d'or), Tomblaine (Meurthe-et-Moselle), Grand Jouan (Loire-Inférieure), Genouillac (Creuse), L'Oisellerie (Charente), Ecully (Rhône), and La Réole (Gironde) ; the farm schoool at La Hourre (Gers) ; the school of cooperage at Saintes (Charente-Inférieure) ; the school of aviculture at Gambais (Seine et-Oise) ; and the three departmental centres of Bourges (Cher), Saint-Etienne (Loire) and Auch-Beaulieu (Cher). Other centres are in course of organization or about to be opened.

These several centres often possess two or three different sections which aim at producing basket-makers, shepherds, rural mechanics, farmer's men and farm servants, gardeners, vine-growers, coopers, butter-makers, cheese-makers, poultry raisers, and so forth.

1. *Apprenticeship to basket-making.* The training section at Fayl-Billot teaches basket-making to the injured men. It works under the double control of the Ministries of Agriculture and of Commerce. The term of apprenticeship is three months, during which the injured men are taught, fed and lodged freely in the school. At the end of their apprenticeship situations in the basket-making trade are found for such as desire them.

An especial section for basket-making for blind men is at work in the same institution. Basket-making is also taught at Grand-Jouan (Loire-Inférieure), and will be taught in the school of dairy-work at Aurillac, in the National School of Horticulture at Versailles, and in the National Shepherds' School at Rambouillet.

2. *Training of Shepherds.* — Numbers of men injured in the war whose working capacity has been diminished can take up the trade of shepherds, which is not fatiguing and is well paid. The cost of boarding and lodging 25 injured men at Rambouillet has been met by a donation. Other centres for the training of shepherds have been opened, as those at the National School of Agriculture at Grignon (Seine-et-Loire) and the Practical Schools of Agriculture at Châtillon-sur-Seine and L'Oisellerie (Charente). The Practical School of Agriculture at La Brosse (Yonne) is also going to open a section for apprentice shepherds in October 1916. The term of apprenticeship is six months.

3. *Training of rural mechanics.* — The training of rural mechanics aims at providing those skilled workmen now lacking to agriculture — the mechanics able to set going or to work the different perfected machines which the modern agriculturist uses (motors, mowing machines, reaping machines, threshing machines and so forth), to regulate the sowing and the manuring machines, to remedy the causes of breakdown or of bad working of motors, to take the machines to pieces and put them together again, and to make the accidental repairs which are necessary to the principal machines. The National School of Agriculture at Grignon, the Practical Schools of Agriculture at Tomblaine near Nancy, l'Oisellerie (Charente), Ondes (Haute-Garonne), Grand-Jouan (Loire-Inférieure) and Auch-Beaulieu (Gers) are at work or are ready to receive pupils. The section of La Brosse (Yonne) will open its doors in October 1916.

The term of apprenticeship varies from six months to a year.

4. *Training of cowmen, farmer's men and farm servants.* — The dearth of cowmen, farm servants and master farmer's men has caused the organization of especial sections for these trades in the following centres: Grignon, Ondes, Grand-Jouan, L'Oisellerie, Châtillon-sur-Seine, La Hourre (Gers) Fontaines (Saône-et-Loire).

The duration of the training varies from three to six months.

5. *Training of gardeners.* Horticulture is one of the most interesting branches of work for injured men. The production of vegetables, flowers and fruit is remunerative and generally needs little physical strength. The National School of Horticulture at Versailles can receive some twenty injured men who are given a complete training in nine months. Other centres, as la Réole, Ondes, L'Oisellerie, la Hourre, Fontaines, Ecully (Rhône) and Genouillac (Creuse), are ready to do this work; and la Brosse (Yonne) will be in condition to begin in October 1916. The period of training in these centres is six months.

6. *Training of vine-growers and coopers.* Most of the agricultural schools in the vine-growing districts have centres for the training in vine-growing. The vine-growing sections of la Réole, Ondes, l'Oisellerie, Fon-

taines, Ecully, Genouillac, La Hourre and La Brosse may be particularized. The school of cooperage at Saintes has also opened its doors for this cause. The period of training is six months divided into two sessions.

7. *Training of milkmen, butter-makers and cheese-makers.* The chief schools of dairy-work and cheese-making have sections for this training. The sections of Poligny (Jura), Surgères (Charente-Inférieure) Mamirolle (Doubs) and Aurillac are open. The duration of training is six months, nine months or a year, according to the needs of particular cases.

8. *Departmental centres.* Several departments have combined their efforts with those of the Ministry of Agriculture, and have organized centres for this agricultural training which are for the most part in excellent working order. The centres at Beaulieu-Auch (Gers), Bourges (Cher) and Saint-Etienne (Loire) may be specified.

In these centres the training lasts for six months.

9. *New creations.* Two important centres for the general agricultural training of the injured are being organised at La Brosse (Yonne) and at Grugny (Seine-Inférieure). The organization of a model farm, which shall specialize in the management and repair of agricultural machines, is in treaty. A section for rural mechanics is projected at the Practical School of Agriculture at Volabre (Bouches-du-Rhone). A section for the horticultural training of injured men has been planned at the Practical School of Agriculture at Antibes (Alpes-Maritimes), and a section for cheese-making at Lannemezan (Hautes-Pyrénées).

In the centres for agricultural training food, lodging and cost of living are given freely to the injured men. The return railway fare is granted at half price, on the guarantee of the director of the training centre.

RUGGERI ALFREDO, gerente responsabile.

INTERNATIONAL INSTITUTE OF AGRICULTURE
BUREAU OF ECONOMIC AND SOCIAL INTELLIGENCE

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Part I: Co-operation and Association

GERMANY.

THE GERMAN AGRICULTURAL CO-OPERATIVE SOCIETIES IN 1915.

SOURCE:

DEUTSCHE LANDWIRTSCHAFTLICHE PRESSE, Nos. 21-22. Berlin, 11-15 March 1916.

§ 1. GERMAN AGRICULTURAL CO-OPERATION IN GENERAL.

In consequence of the war the number of agricultural co-operative societies has increased far less in 1915 than in the preceding year; but on the other hand there has been a marked diminution in the number of these organizations which have been dissolved. In view of present circumstances therefore the conclusion must be that co-operation has made notable progress. The returns give the following figures:

	1915	1914	Difference
New societies on the co-operative register . . .	290	1035	— 745
Societies dissolved	126	222	— 96
Increase	164	813	— 649

Co-operative societies of every kind have had part in this increase, but in different degrees.

Statistics show that in 1915 there were:

		Number of these newly founded in 1915
97	central co-operative societies	—
2,833	co-operative societies for collective sale and purchase	52
17,781	" savings and loan banks	63
3,588	" dairy societies	2
4,353	" societies having other objects	47
28,652	agricultural co-operative societies . . . . . Total	164

having a total membership of two and a half millions.

A year of war having given no occasion to enlarge the sphere of activities, attention has again been concentrated on internal affairs and the work of consolidation, as, for example, the work of revision which is the most important task of the federations of co-operative societies.

a) *The Revisory Work of the Federations of Co-operative Societies.*

By a decision of the federal council, dated 8 September 1914, the completion of the revisory work was postponed for four months and thus a period of two years and four months was allowed for it. An enquiry made on 1 October discovered that very few co-operative societies had not yet completed the work and it was therefore decided that there should be no further postponement. The fact is the more satisfactory because a particularly detailed review of the management of those co-operative societies whose directors had joined the colours was necessary. The absence of the managers and the difficulty of replacing them did not affect only the revising staff, who are in some sort advisers to the co-operative societies, but was also felt in the offices when it was a question of checking accounts, and of passing the books and the minutes of certain co-operative societies having especial objects. In the offices for checking accounts recourse was had successfully to women who were engaged as assistants ; in the co-operative societies substitutes were sought and found. The wives and daughters of mobilized accountants set to work and became increasingly skilful in the work of book-keeping. The war has taught a great lesson — that what has been done to educate the younger generation in the matter of co-operation is not sufficient, but that it is essential to pursue the same end in the future more and more strenuously. The federations of co-operative societies insisted on the necessity of organizing meetings. Courses of instruction were instituted for the training of members of committees and superintending councils, and of accountants. The district councils (Bezirkstage) and meetings were used more and more to enlighten those concerned in the especial duties of co-operative societies in war time (economic measures and the necessity of co-operative action for their execution). This work of popularization was seconded by the co-operative press, of which the influence is increasingly widespread and strong. By

reason of the particularized form of activity, which the war has made incumbent on co-operative enterprise, the federations found that their relations with their central offices had become closer. A co-ordination of effort resulted : the federations becoming responsible for educational enterprise ; and their central offices, helped by the co-operative societies, for duties affecting the course of business. In future it will be well to regard as of the highest importance this strict co-ordination of the work of the federations and that of the institutions charged with carrying out proposed measures.

b) *Co-operative Credit.*

The organization of co-operative credit has been fully adequate to meet the great exigencies of present circumstances and has discharged the new duties which these entail. It has, with astonishing success, directed the stream of capital liberated from agricultural enterprise towards the savings and loan banks and from them to the central banks, and has found an opportune use for this capital which has suddenly become available and which ought to return to agriculture so soon as the war ends. The central banks, effectively supported by the savings and loan banks, caused a very considerable return of gold to the Bank of the Empire. Mention should also be made of their efforts increasingly to extend the influence of the factors which go to reduce to a strict minimum the circulation of coin. Co-operative enterprise has met with the greatest success in the matter of the issue of the second and third war loans, and attained to a subscription of something like 525 million marks. The central banks also used the means at their disposal for objects outside the proper scope of their activities, as for the provisioning of the army and the support of measures tending to secure the food supply of the people. They supported the efforts made in the same direction by central co-operative societies for collective sale and purchase, and succeeded in closely correlating all effort in this sphere. Although within narrower limits the rural savings and loan banks have generally accomplished work analogous to that of the central banks.

So soon as the war ends the co-operative societies will be faced with needs no less important then those of the present time. The spirit of economy must therefore still be stimulated in every possible way ; and for this end the adoption of a rational policy where questions of interest are concerned will have the happiest effect.

c) *Co-operative Sale and Purchase.*

Collective sales and purchases of merchandise have been conducted in extraordinary circumstances, sufficiently suggested by the terms requisition, restriction of commercial freedom, trading monopolices in the chief articles of diet, prices by agreement and maximum prices. This critical time has been that at which *professional co-operative organization* has done

its utmost to satisfy the most pressing needs of its members. Needless to say its capacity was not entirely sufficient for the task. The famine in forage and manures, particularly in azotized manures, could not be remedied; but professional co-operative organization attempted to secure a regular distribution of the existing supplies of these articles. *Co-operative organization with a view to collective sales* successfully facilitated the small agriculturist's task of procuring them ; and specialized on an effort to deliver goods of irreproachable quality and to combat the culpable speculation in this branch of trade. But all efforts would have been vain had not the adherence of the agriculturists to the central co-operative societies for sale and purchase, and their exclusive dealings with these, been secured. These societies had in districts of some importance been charged with the distribution of forage ; and they also took part in the efforts made to ensure the people's food supply (provision of milk, bread, potatoes, butter etc.), thus acting in the sphere of co-operative sales.

Entirely new conditions were created in the trade in cereals by the legislation providing for the food supply of the army and the people, and the *co-operative sale of cereals* had to adapt itself to them. It could be of use only as an intermediary ; and it was this place which the central co-operative societies for sale and purchase successfully filled.

d) *Co-operative Sale of Live Stock.*

This business was also undertaken by the co-operative societies. As a branch it did not develop equally everywhere: in Hanover, Pomerania, the Rhine provinces and the south of Germany it became very important. All the honour due for the organization of the provisioning of the army belongs to it. Unfortunately the necessary conditions for extending to the towns the activities which had been so beneficial to the army did nor at first exist. The new ordinance as to trade in live stock seems however to have changed the aspect of affairs. Towards the end of the year special measures were adopted in Prussia, in order to secure for the towns their provision of pigs for slaughter, pig farmers being enabled in return to obtain forage at reasonable prices. Experiments have not yet been sufficiently complete to allow definite conclusions to be drawn from them. Within their sphere the co-operative societies for the sale of live stock have been able, above all, to prevent the premature and unseasonable slaughter of beasts, and to oppose the sale of cattle at low prices.

e) *Co-operative Dairy Societies.*

The original and proper object of these societies, that of improving the quality of milk as much as possible, had to take a second place, and yield to the more important duty of taking part in providing milk and butter, a task constantly made more difficult and more necessary by the growing scarcity in milk and fat. The work was complicated by the lack of an experienced staff, and even more by the diminution in dairy production oc-

casioned by the scarcity of forage. The famine in milk, first felt in the big towns, obliged these co-operative societies to provide more milk than previously. Towards the end of the year the sale of butter was subjected to certain restrictions, which will possibly be accentuated.

f) *The Public Service rendered by Co-operative Societies.*

Since the beginning of the war the co-operative societies have been active on behalf of the public. At the end of the first five months (end of 1914) the federations of central co-operative societies and of co-operative societies in 16 federated districts which have made returns, distributed nearly three quarters of a million marks. Since then general collections have not been made. Privately given help has had most importance in this sphere, and it is a factor which eludes investigation and cannot be estimated, even approximately, in figures. We will mention however the collections for the Red Cross, the aid given to the devastated country of eastern Prussia, a successful propaganda in favour of war insurance, and the work of ascertaining who have been injured by the war.

§ 2. The National Federation of German Agricultural Co-operative Societies and their action in 1915.

1. *Forces at its command.*

Most of the 28,652 rural co-operative societies have joined the National Federation of German Agricultural Co-operative Societies, which at the end of 1915 numbered 31 provincial federations and associations, comprising :

60	central co-operative societies,
11,653	savings and loan banks,
2,315	co-operative societies for sale and purchase,
2,268	co-operative dairies,
2,514	other co-operative societies ;

that is a total of 18,810 agricultural co-operative societies, namely 65.65 per cent. of their whole number. At the end of 1914, 16,121 co-operative societies belonged to the federation. The membership of the latter has therefore increased notably, mainly through the accession of three federations — the Federation of the Agricultural Co-operative Credit Societies of the Grand Duchy of Baden, the Federation of the Agricultural Co-operative Societies of the Kingdom of Wurtemberg, and the Federation of Treves for inspecting the books of agricultural co-operative societies. Further the Federation for Purposes of Sale of the Dairies of North Germany, a limited liability society which has its offices at Berlin,

has joined the National Federation, the headquarters of which are at its offices.

2. *Meetings.*

Because of the war no Congress of Co-operative Societies was convened, and the Revising Assembly, usually co-incident with the congress, was not held. Questions bearing on co-operation were treated with a proportionate increase of thoroughness by the organs of the National Federation.

3. *Special Committees.*

a) The deliberations of the *Special Co-operative Organization of Credit* were concerned with the subscription to the war loans and with the part the co-operative organization of credit might play in ensuring the people's food supply and the provisioning of the army and navy, with the propaganda in favour of delivering gold to the Bank of the Empire, and with the prescription contained in § 33 line 2 of the law on co-operative societies as to the publication of minutes.

b) *The Special Committee for the Collective Purchase and Sale of Merchandize* considered the part which agricultural co-operative societies had taken and would take in feeding the people and provisioning the army, latterly with especial reference to collaborating in securing the potatoe supply. Particular attention was given to the development of the agricultural market as regarded forage, manures, clover seeds and grasses and roots for forage, and also to the numerous measures of an economic character taken by the empire and the federated States in order to give another basis to the trade in articles auxiliary to agriculture. The greater the interference with free trading, the more pressing became the need for the collaboration of co-operative organizations in the execution of legal prescriptions.

c) *The Special Committee for Co-operative Dairies* examined the methods by which the co-operative dairies might meet the new exigencies of present circumstances with regard to the people's food supply, namely by encouraging the sale of fresh milk and butter making, or by recommending skimmed milk and cheese made without cream as popular articles of diet.

It considered also questions relative to the influence of maximum prices for milk and dairy produce on the co-operative dairies, and the question of modifying its measures touching on the price of unskimmed and skimmed milk and soft cheese, in the interests of the supply for large towns. A detailed report was made on the experience of co-operative societies in war time, and the result of the enquiry, instigated by the Prussian Minister of Agriculture, into dairy production and the improvement in the quality of milk, in July and August 1914 and 1915.

d) *The Special Committee for Co-operative Societies of Vine-Growers* was formed in virtue of the new rule of the National Federation.

4. *Council of Administration and Grand Committee.*

These bodies have had to attend to many questions of administration and to the following business: statistical and other enquiries into the influence of the war on the various co-operative societies, and the competition for prizes of works discovering the experience of these societies during the war; agricultural co-operation before and after the war; the part of co-operation in providing milk and dairy produce for the people; co-operative enterprise for public service during and after the war; taxes on war profits; and the examination and confirmation of decisions of the special committees. The routine activities of the federation constantly extend their scope. This is particularly the case as regards its function of giving information and advice, for the need for these grows as a result of the many new legal prescriptions and has become acute since co-operative organization has been obliged, more and more, to take part in the execution of measures which have an economic character. The work of the *General Reviser* has been very markedly increased.

The German School of Agricultural Co-operation (Deutsche landwirtschaftliche Genossenschaftschule) has not yet been able to re-open its doors which were shut by the war. *The Office for Technical Advice of the National Federation* (Technische Beratungsstelle des Reichverbandes) has had, besides its normal business, to attend to two fresh matters of importance — the building of a co-operative granary at Heiligenstadt, and the rebuilding of the warehouse of the chief agricultural co-operative society of Berlin, which was destroyed by fire.

5. *The Finance of the Central Co-operative Societies of the National Federation.*

a) *Central Banks.* All these have not yet sent in reports. The following figures are derived from 18 of the 26 central banks.

The total sum covered by their business increased, in round figures, by 83 per cent., passing from 3.7 to 6.8 thousand million marks. The circulating capital increased to a yet greater degree: it reached 353 millions at the end of 1915 as against 194 millions at the end of 1914. And the deposits shew an even more striking growth: their sum was 305 millions as against 164 millions in the preceding year. The chief part of the increase can be traced to the current accounts, which from 106 million marks passed to 221 million, while the deposits in loans which may be recalled passed from 57 million to 84 million marks. The amount of the deposits would be markedly increased, if it were not necessary to oppose to the very important sum of the payments, which show an increase from 556 million to 923 million marks, the considerable amount of the repayments, represented by 755 million marks as against 499 million in the preceding year. Because of their financial position the debts of co-operative societies have diminished, having fallen from 113 to 81 million marks.

b) *Central Co-operative Societies for Sale and Purchase.* The figures concerned with these are likewise incomplete.

Collective purchases by 15 out of 27 co-operative societies were of

33.67 million zentner of the value of 138.25 million marks in 1915,
as against 37.57 » » » » 120.41 » » 1914.

These figures show the difficulties encountered in such selling, and are a brilliant testimony to the efforts co-operative societies must have made to overcome them as far as possible. In spite of all obstacles the reduction in sales is one of only 11.43 per cent. ; but on the other hand expenditure has increased absolutely by 14.82 per cent. and relatively by 25.79 per cent.

The growth of co-operative selling has been most rapid in the case of cereals — a fact due to the circumstance that central co-operative societies for sale and purchase have been placed under contribution for the provision of the people with bread making cereals and for the feeding of the army. The value of goods sold was in 14 central co-operative societies:

in 1915, 167.8 million marks, of which 144 million were for cereals
» 1914, 73.8 » » » 54 » » »

Thus while the total value of the goods sold increased by 127.4 per cent. that of the cereals sold increased by 166.6 per cent. But as in the case of the central banks it is necessary to note that these results are only partial and are not therefore completely representative. It is possible that the figures would be modified if the results obtained by all the societies were known.

JAPAN.

NEW CENTRAL ORGANISATION OF THE SERICULTURAL TRADE ASSOCIATION OF JAPAN

by TAKEO ONO

of the National Agricultural Society of Japan.

INTRODUCTION.

Japan being one of the most important countries as far as the production of raw silk is concerned, may now be congratulated on its newly organized central institute of sericultural trade associations.

It must be remembered in this connection that there was a big sericultural society, the *Dainippon Sanshikai* (Sericultural Society of Japan) in existence before this new association came into being. This society being only a private organization however, its sphere of activity was in some measure restricted. The government moreover had no means of ascertaining the views of silk-worm breeders in relation to the silk industry of Japan, while the people, on the other hand, experienced a no small inconvenience by reason of the lack of a central institute, through which they might express their opinion not only to the government, but also to the general public. Such being the case, both the government and people have been in urgent need of a central institute for many years past. Taking this necessity of the present day into serious consideration, the government when drafting the law on the sericultural industry, included therein some provisions relating to the central institute of the sericultural trade associations. This draft law having duly received the sanction of the Imperial Diet, with some modification, it was put into operation in 1911. Though a central institute was in this way created in the country, the actual organization of the institute had not been carried until four years after the promulgation of the law. The cause is mainly to be found in various circumstances rendering the moment unpropitious. This year, however, the central organization took actual shape at last. Japan therefore now boasts two big sericultural societies, the *Dainippon Sanshikai* — a private organization, and the Sanshigyo Chuokai — a public institution.

§ 1. Historical sketch of sericultural trade associations.

In order to enable the reader to understand the real nature of the newly created central institution a clear knowledge of the organization of the trade association in general and the history of its development is necessary.

It was in 1875 that the government issued a departmental ordinance having in view a more rapid progress of Japanese sericulture. This was the first step ever taken by the government in relation to the silk industry. The government sought to encourage by this ordinance a strict selection and careful drying of cocoons, the improvement of the art of reeling the cocoon, the cultivation of mulberry trees and the rearing of silkworms, the inspection of silkworm eggs, the co-operative conduct of silk conditioning and packing work. But the ideas of Japanese farmers and manufacturers not being then as progressive as they are at present this ordinance was not following by any corresponding activity on their part.

The government measures therefore resulted in a total failure.

Twelve years later, in 1898, the Law of the Exporters' Trade Association was promulgated, and the ordinance of 1875 was repeated in March 1899. But it was soon found that the new law had only given facilities to the producers of export goods and those manufacturers and farmers who have no connection with foreign trade were entirely deprived of any benefit. In consequence of this, protests were made by all those manufacturers and farmers whose products were mostly consumed at home. As a result of these complaints, the government tooks the matter into consideration and subsequently issued the law of the chief products trade association in place of the former law, which was abrogated soon after the promulgation of the new one. The local trade associations and the unions of trade associations which were already in existence under the former law, were to be controlled by the new law. The sericultural trade associations are organized in conformity with this new law as was mentioned above. The scope of this important law is as follows :

(A) Persons engaged in the production, manufacture or sale of staple products, or those closely connected with these occupations may organize a trade association. In case two thirds of the fellow traders in a defined district agree to organize a trade association, the remaining one third of them are conpulsory members of the organization.

(B) The principal object of the trade association is to remedy the defects existing in sericulture and the silk trade and to promote the interests of those trades.

(C) Local trade associations are authorized to organize a union of their own with a view to getting into relations with each other in order to attain the object in view.

(D) Each association and union of associations shall appoint an offi-

cial board consisting of a president, vice-president and a number of councillors.

(E) Each association and union of associations is authorized to inspect articles produced by primary associations or members, to fine those infringing the regulations of the association or to confiscate articles produced in an illegitimate way.

(F) When the Minister of Agriculture and Commerce thinks it desirable to organize a trade association or union of trade associations in a certain district, he is empowered to order the traders residing in such district to form either one or the other.

The Minister of Agriculture and Commerce is also authorized to issue orders at any time dissolving the associations, suspending their business, dismissing their managers or councillors, or cancelling the resolutions passed at the general meeting, in case the conduct of these officers or the purport of the resolutions is contrary to the fundamental principle of the law, or they are harmful to the welfare of the general public.

(G) With the consent of the two thirds of its members, each association may dissolve itself after official sanction has been obtained.

(H) Though the Minister of Agriculture and Commerce partly takes upon himself the supervision of the local trade associations, most of the duty of superintendence is entrusted to the prefectural governors, who not only superintend the local associations and unions of associations themselves, but are bound to ask the Minister of Agriculture and Commerce for instructions with regard to measures to be taken on very special occasions.

§ 2. Present condition of sericultural trade associations.

The total number of the sericultural trade associations which, as has been stated, are organized in conformity with the law of the chief products trade association, was 264 at the beginning of this year (1916).

The distribution according to the class of association is as follows:

Central organizations	1
Unions of associations	16
Raw silk trade associations	110
Silkworm seed trade associations	84
Cocoon reelers' trade associations	25
Silkworm rearers' trade associations	17
Waste silk trade associations	11
Total	264

It will be seen from these figures that raw silk trade associations stand highest, while the waste silk trade associations are represented by the lowest figure.

It would be more interesting from certain points of view to know how these sericultural trade associations are distributed locally over the empire. The following are the figures at the end of 1914 according to the prefectures.

Prefecture	N° of associations	Prefecture	N° of associations
Tokyo	2	Akita	11
Kyoto	13	Fukui	6
Asoka	—	Ishikawa	7
Kanogawa	2	Toyama	9
Hyogo	3	Tattori	6
Nagasaki	—	Shimane	3
Nigata	16	Okuyama	2
Saitama	10	Hiroshima	2
Gumma	19	Yamaguchi	—
Chita	1	Wakayama	1
Ibaraki	1	Takushima	2
Tochigi	1	Kagawa	5
Nara	1	Ehime	8
Miye	10	Kochi	1
Aichi	16	Fukuoka	—
Shizuoko	17	Oita	1
Yamanoshi	2	Saga	1
Shiga	2	Kumamoto	1
Gifu	4	Miyazaki	1
Nagavo	33	Kagostima	2
Fukushima	9	Hokkaido	1
Iwate	1		
Aomori	—		
Yamagata	4	Total	254

It is clear from the above figures that the prefecture of Nagano, which is the largest silk producing prefecture of Japan, possesses the largest number of sericultural trade associations, while the prefecture of Gumma is second in quantity of production.

It is not too much to say that many defects which once existed in Japanese sericulture and cocoon reeling have been removed to some extent. It must, however, be regretted that the existence of some trade associations is only nominal, and no improvement has been attained in their business. The department of agriculture and commerce, therefore, is doing its best to induce these associations to carry out improvements as early as possible.

§ 3. Central organization.

The central organization of sericultural trade associations is organized in conformity with the law of the sericultural industry and the chief products trade association. Sixteen unions of sericultural trade associations and two hundred and forty seven local sericultural trade associations are affiliated to the new central institute.

The object of the institute is ; — (1) to promote mutual relations among the trade associations, (2) to encourage the exportation of raw silk and silk goods, (3) to promote the interest of sericulturists and silk merchants.

The principal work to be carried out by the central institute is ; —

(1) To remedy the defective practices prevailing among Japanese sericulturists and manufacturers ;

(2) To consider any measure calculated to develop the sericultural industry ;

(3) To make inquiries into the laws or ordinances relating to sericulture for the purpose of ascertaining any existing deficiencies ;

(4) To answer any enquiries made by the Minister of Agriculture and Commerce ;

(5) To collect and publish statistics of the silk industry both at home and abroad ;

(6) To extend the foreign market for Japanese raw silk and silk goods ;

(7) To establish communication with similar associations in foreign countries ;

(8) To guide and give every assistance to the primary trade associations ;

(9) To act as mediator when any dispute arises between trade associations ;

(10) To carry out any undertaking of particular importance for the development of the sericultural industry.

Each primary association on the other hand, is privileged : *a*) to elect a representative with the right to vote at the annual conference of the central institution ;

(*b*) to express its view on the books of the institution ;

(*c*) to request information at any time on the work of the institute and to inspect the account books of the institute ;

(*d*) to receive a share of the remaining property, in case the institute is dissolved.

On the other hand on each primary association the following duties are incumbent :

(*a*) to enforce its regulations and carry into effect the resolutions passed at the annual conference of the central institution ;

(*b*) to contribute towards the expense of the central institution ;

(*c*) to abide by any award between contending parties by the central institution;

(*d*) to be liable for the debt of the institution if any on dissolution of the latter;

(*e*) to submit reports to the central institute concerning change of officers, accounts or general position, of each association.

The annual general conference is to be attended by the representatives elected by local associations and the special representatives appointed by the Minister of Agriculture and Commerce in accordance with the Silk Industry Law. The annual conference is to be convened in February of each year and the following matters are to be dealt with:

(1) Budget of the institute;

(2) The approval of the accounts and work executed by the institute;

(3) Extraordinary expenditure;

(4) Foundation fund and reserve fund;

(5) Matters concerning alterations of the regulations of the institute;

(6) Election of President, vice-president and Councillors;

(7) Dissolution of the institute;

(8) Other important questions.

The Board of Councillors, which is composed of representatives and special representatives, is convened at the request of more than seven members of the board or by the order of the president. The work assigned to the board is as follows:

(1) Supervision of the works undertaken by the Institute;

(2) Preliminary investigation of the matters for the agenda of the annual general conference;

(3) To consider any question put by the President.

The departmental committee of the institute is composed of three departments — sericultural department — department of silkworm eggs — raw silk department. Each department is organized by the representatives who have special interest and knowledge relating to the business allotted to such department. The departmental committees discuss various questions in fuller detail than is done at the sitting of the general conference.

§ 4. First session of the annual general conference.

The first session of the annual general conference of the new central society was held for five days, beginning on the 23rd of March last at the assembly hall of the Department of Agriculture and Commerce, all the special and ordinary representatives, to the number of 61, being present. Vicount Kiyoura, ex-Minister of Justice, was elected president and Mr. G. Shimura now president of the Mortgage Bank of Japan and Mr. A.

Shido, Director of the Imperial Raw Silk Conditioning House, were elected vice-presidents.

The most important resolutions passed at the conference were as follows ; —

(1) To memorialize the Government that one million and six hundred thousand *yen* out of the profits gained by the Imperial Raw Silk Company should be granted to the institute as its foundation fund.

(2) The whole amount of capital given by the government as subsidy to the Imperial Raw Silk Company, being five milllion *yen*, should be reserved as the " Sericultural Improvement Fund ".

(3) The government should grant two hundred thousand *yen* as subsidy to the unions of Sericultural trade associations.

(4) Loans should be granted to cocoon reelers out of the national deposit at a low interest.

(5) A Bureau of Silk Industry should be established in the Department of Agriculture and Commerce.

Reference must be made in this connection to the fact that the government, complying with the demands of silk merchants who asked that the price of raw silk should be regulated by the government in view of the price of raw silk having shown a sudden fall at one time owing to the outbreak of the European war, established the Imperial Raw Silk Company with a subsidy of five million *yen*. But the price of raw silk having gradually advanced since then, the company, instead of suffering losses, secured a considerable profit. Consequently the company finding its work quite superfluous, was obliged to dissolve and liquidation is now in progress. The Central Institute of Sericultural Trade Associations now desires to use this profit as its foundation fund. The institute further expressed its desire that the subsidy the government once granted to that company should be diverted to the " Sericultural Improvement Fund ".

It is doubtful, however, whether the Government will adopt these representations or not. Generally speaking the Japanese farmer lacks the spirit of independence ; whenever he has facilities for expressing his opinion by a central organization, he always asks the government for financial aid. But he will learn in no distant future that he can gain much more by his own efforts than by relying on a government subsidy.

Conclusion.

In view of the character of the representatives who had been elected or appointed before the first session of the institute was convened, the *Sangyo shimpo* (a monthly review of sericulture) pointed out that the new central institute seems to be the organ of the merchants of raw silk and silkworm eggs, not that of cocoon producers — the real sericulturists.

This criticism may be true in a certain degree, but such phenomena are inevitable during the period of transition in industrial development.

All things considered, the newly created central institute is a very important organization both for merchants and sericulturists who, by means of this institute will not only be able to consider every measure to be taken for the promotion of their interests, but will be able to express their views more effectively than they have done hitherto. The characteristic of modern industry lies in its organization, by which every man may combine his powers with those of others.

The Japanese sericulturists and silk merchants who had hitherto been working separately have now realized the importance of combining into a national organization and working together. The government, on the other hand, has now the means of ascertaining the general view of Japanese sericulturists by putting questions to the newly formed central organization. And it is also able to know what opinion the people entertain towards the policy assumed by the government, or what plans they have for the increase of cocoon production and the extension of foreign markets. Viewed from this standpoint, I believe that the formation of the new central organization of sericultural trade associations of Japan will be welcomed not only by Japanese people, but by the consumers of Japanese raw silk all over the world.

SWEDEN.

CO-OPERATIVE AGRICULTURAL CREDIT.

Swedish agriculturists have long enjoyed a well organized land credit, afforded by mortgage companies and public mortgage banks. But too much recourse has been had to the expedient of mortgaging property. Persons, whose own capital is insufficient for such purpose, procure or retain landed property by its means. The consequent risk is one which has had to be faced.

Gradually, as the land has become more and more encumbered, it has become necessary to organize more scientifically the credit required by agriculturists, in order that they still may farm their lands. The increasing employment of methods of intensive culture has made this need yet more imperative, and created a corresponding demand for capital.

It is true that farmers have been able to borrow from savings banks, but these have not made loans on the advantageous terms which would alone have made the agricultural industry reasonably profitable. They have not been able to take into account the necessity under which a farmer often labours of obtaining certain conditions for redemption and payment of interest. It is, for instance, of the highest importance to a farmer that his repayments should be made at the moment when his harvest is most profitably sold and he can command ready money. Banks and savings banks are moreover unable or do not care to control the employment of loans : to lenders of their class it matters little whether the money lent be spent on agriculture on otherwise, so long as the security be valid.

The matter of securities often has unfortunate results. Owing to the system in force capable farmers have frequently been ruined because their neighbours, for whom they were answerable, have not been able to make their due payments.

Thus many have found themselves in embarrassed circumstances ; whereas the business of affording credit might have been easily regulated had responsibility been more justly divided.

On several occasions it has been pointed out that the urgent case for reform would end by making it necessary ; and the example of mutual aid societies, which in other countries have been so useful, has been cited.

The movement these societies represent began in Germany. It was there that other countries found their model for the regulation of co-operation among agriculturists, with a view to the organization of agricultural credit. The Raiffeisen banks, formed in the beginning of 1860, have served as an example to many European countries, outside Scandinavia, and to several countries in other parts of the world.

Several years ago it was proposed in Sweden that the State should encourage the formation of societies having an aim and an organization corresponding with those of the Raiffeisen banks. In an address to the crown, dated 7 November 1903, the Reporter of Rural Economic Societies expressed the wish that the king might cause a search to be made into the degree and the method of improvement possible to the existing condition of agricultural credit, and that he might take the measures which such an enquiry should seem to recommend.

On 8 December in the same year the Administration of Agriculture was ordered to give an opinion in the matter ; and on 1 December 1908 it presented a report. This proposed that measures should be taken by the State in the interest of small farms in order to support the credit societies.

The proposals differed in some respects from the Raiffeisen system, and did not authorize the societies to undertake any independent banking operations whatsoever. The societies were to depend entirely on the funds placed at their disposal by the State. The Post Office Savings Bank was to act as an intermediary between the State and the societies.

This scheme has been much criticized. The most serious stricture was that made by the Administration of the Public Debt, to the effect that public funds were for some time in advance already too much implicated and that therefore it was necessary to discover some other means of procuring circulating funds. On 11 November 1910 the presiding official of the Royal Department of Agriculture called upon certain experts to find means for procuring the necessary capital and to examine the scheme of the Administration of Agriculture.

Their report was submitted to this official on 19 January 1911. They proposed that loans should be made by the savings banks, the commercial banks or other financial institutions in place of the State, which should merely make certain grants towards costs of administration in order that the societies might employ capable accountants.

But this scheme was also criticized, and the Royal Department of Agriculture caused the report of the experts to be recast. The proposals of the Royal Department differ from their predecessors chiefly in presuming a far larger activity on the part of the societies in the matter of mutual aid.

The earlier scheme would not have allowed the societies to administer banks ; the later foresaw that if the societies interested themselves in thrift they would be able themselves to procure a large part of their circulating funds. It provided moreover for the formation of central societies which should have directing duties.

The scheme gave no prominence to the organization of a union which should comprise all the societies formed in the kingdom, like those existing

in several other countries. It was believed that the system of credit societies would no sooner have reached the desired stage of development than an institution of this kind would be formed spontaneously.

Criticism of the scheme of the Royal Department of Agriculture caused special experts to be called in to examine the department's proposals and pronounce on them. They presented their report on 31 October 1913.

The proposals had been that only societies having limited personal liability should be allowed to be mediums for affording credit; and that societies ought themselves, or by the means of central societies formed by themselves, to secure their necessary working capital, and should be allowed to borrow from public funds only when the capital obtained otherwise proved insufficient.

The experts considered that the proposed means for obtaining funds would not be sufficient for the societies : the need for capital of their members, expressed in requests for loans, would not be supplied if they merely opened a savings banks for these members and made discounts preferably with the Bank of the State. Even if the two million crowns, which the State proposed to advance to the societies in the form of a loan, were added to their funds their position would not become sound.

The experts therefore suggested other expedients, among them that of authorizing these societies to open public savings banks, that is to receive deposits not from their members only but from any desirous of making them. But such authorization was to be given only after the societies had been at work for some time. The central societies, which would be controlled by a public commissary and administered by experts, practised in business, would be able on the other hand to receive deposits from the public immediately.

The funds thus accumulated would form a working capital sufficient for loan transactions. But since a considerable time would elapse before they could be got together, it was necessary to find ways to procure working funds at the outset, and the experts suggested recourse to the savings and other banks.

To obtain a reasonable return on their capital, the savings banks have been obliged to deposit it in the commercial banks. They could with advantage hand over the sums of money of which they thus dipose to the agricultural societies and their central organizations as a working capital. It may be presumed also that the savings bank would find it well to deposit larger sums with the central societies, rather than administer numerous small cash deposits and various securities.

Two interested parties would thus collaborate usefully.

When the preliminary examination of the question had thus been completed the king brought it before the Riksdag. The mixed commission representing banking and agriculture having pronounced favourably on the royal proposal, it was accepted by the two chambers without modification.

We will now shortly explain the organization of agricultural credit for small farmers, according to the laws and decrees approved by the king from

11 to 18 June 1915, and according to the model statutes for agricultural and central banks which were drawn up by the Royal Department of Agriculture. The laws and decrees came into force on 1 January 1916. They are published in the Statute Book (*Svensk Författningssamlung*) Nos. 230-237.

Earlier schemes gave the organization its starting point.

The standard organization of these associations is that loans are granted and paid to agriculturalists by local *agricultural banks* which must unite to form *banks of agricultural credit.*

A local agricultural bank must be organized like an economic society having limited personal liability. Its request to be approved must be submitted to the examination of the presiding official of the county in which the committee of the agricultural bank meets, and such request must be accompanied by a copy of the bank's statutes.

In a county having as yet no central bank the presiding official nominates a delegate who inspects the agricultural banks in the name of the State. The society which constitutes a local agricultural bank cannot have less than fifteen members, who must be Swedish subjects and belong to economic societies registered in Sweden or Swedish municipal areas. The sphere of the bank's action must be limited so that all members may be mutually aware of their personal and economic positions.

Rights of participation in the bank are proportionate to the number of hectares of land for which a member has been admitted to the society. Agriculturist and landowning members cannot have rights in virtue of land which they own or cultivate outside the territory which constitutes the bank's sphere of action. If an owner have let his land he has rights of participation proportionate to no more than half the cultivated land on his property. No member may enjoy rights of participation in virtue of more than 50 hectares. A member's right to borrow is regulated according to the amount of land in virtue of which he has been admitted to the society. The maximum amount which by the statutes a member may borrow must not exceed 75 crowns for each hectare of cultivated land in virtue of which he participates in the bank.

Every member of a society constituting an agricultural bank must pay at least ten crowns for every ten hectares of land which he has begun to cultivate and in virtue of which he has joined the society. The members benefit by an annual distribution of a sum of money of which the maximum limit is fixed by the statutes. Each member must give a personal guarantee for a sum greater by one half than the amount which he has the right to borrow.

As to contributions the royal decree rules :

(1) that at least a tenth of each contribution ought to be paid in ready money ;

(2) that contributions should be united under the name of the capital of the agricultural bank ;

(3) that the payments made to the central bank of agricultural credit may be taken from this capital.

A deficit carried over from the preceding year should be covered by the agricultural bank's annual profit and at least 15 % of the balance should be added the reserve fund. As soon as the latter reach a sum equivalent to 10 % of the total sum which the members have the right of borrowing, and — when the bank is a savings bank — of half the balance of the depositors according to the books of the preceding year, the payments to the reserve fund may be suspended. But if the reserve fund be less than this prescribed amount payments to it should be continued or resumed. If the reserve fund exceed the amount of a deficit it may be used to cover it, in proportion to the amount of the sum which might have been distributed to the members in the year producing such deficit.

The sums which covered the deficit of a previous year may be returned to the members by deductions from the annual profits. If the annual profits are so considerable as not to be entirely absorbed by these payments the bank can pay a dividend to the members proportionate to their contributions, if the meeting of the society decide on such a course.

The bank grants direct loans according to the capacity of the funds at its disposal, and borrows on notes of hand for members of the society.

Loans are granted also for objects especially contemplated by the sta tutes :

(*a*) for the purchase

(1) of domestic animals and machines useful to agriculture,

(2) of seeds,

(3) of forage and manure ;

(*b*) to procure circulating funds for agriculture in the least productive season ;

(*c*) to procure funds for accessory agricultural operations which improve a property ;

(*d*) to construct an aqueduct, make canals, or secure the plant for the preservation of dung (a ditch for dung), or to develop profitably the natural resources of a property ;

(*e*) to make small buildings ;

(*f*) to pay the fee for admission into another economic society which exists to procure agricultural implements and machines, seeds, forage and manure or thorough bred animals, or encourages the exchange of agricultural products.

The bank has no right to receive deposits except on savings bank books and from its own members, or from members of economic societies themselves members of its own society. But business of the latter kind cannot be undertaken before the funds of the bank have reached at least 1,000 crowns.

The administrators of an agricultural bank must add to their annual report a table showing profit and loss, and the statement of accounts for the preceding year.

According to the model statutes drawn up by the Royal Department of Agriculture the bank must be managed by from three to seven members of its society, elected in the society's general meeting to hold office for two

years. The meeting also elects from two to five members as supplementary managers for the same period.

The managers meet to examine requests for loans and treat of current business. Their duties include examination of the reports received as to the manner in which the loans granted are employed. Payments and examinations of letters of charge are made only in the presence of at least one manager and of the treasurer of the agricultural bank. At least twice a year the managers must take stock of the assets and other resources of the bank.

The general meeting elects for a period of two years two auditors charged to inspect the accounts of the agricultural banks and the administration of the managers. The auditors meet at least twice a year without giving notice to the managers. They verify and report on the bank's books. They should also report on the managers, favourably on unfavourably. If they make strictures the managers should give a written explanation of their conduct.

In the matter of a bank's transactions the Royal Department of Agriculture gives very detailed instructions. The agricultural banks are free to make loans with or without security. The interest paid by borrowers constitutes the chief revenue of a bank. Interest should not be calculated only at a rate high enough to meet all costs, but should furnish an excess from which funds can be formed and a dividend paid to members. But the maximum rate of interest must not exceed that established for bank loans.

The banks may themselves fix the terms at which loans are repayable. It is difficult for them to make general rules on this point: the managers must decide according to circumstances. Thus loans may be made for:

1)	the purchase of strengthening foods for live stock	3-6 months
2)	» » » seeds and manures	6-9-12 »
3)	» » » cows	12-18 »
4)	» » » thorough bred stock	2 years
5)	» » » machines	2-3 »
6)	acqueducts	3-4 »
7)	bringing land unde cultivation	3-7 »

The conditions for payment are inscribed in the bank's book of loans and the borrower's book. If the borrower do not fulfil the conditions laid down by the statutes, the bank should exact immediate repayment of the loan to him.

A member of a society constituting an agricultural bank may resign after presenting his written resignation to which his legal signature is affixed. His resignation is accepted at the first rendering of accounts which occurs after an interval of at least six months from the date on which he proffers it. The managers may expel from the bank a member who

(1) does not fulfil his engagements to it;

(2) joins another society constituting an agricultural bank in virtue of the cultivated land in right of which he participates in the bank in question ;

(3) neglects his land generally ;

(4) or has been declared a bankrupt.

The contributions of a resigning member cannot be repaid to him until he has fulfilled all his engagements to the bank, and until the total funds have so been augmented by new contributions that their sum is not less than it was at the time of his resignation.

If an agricultural bank be dissolved the members have the right to receive their proportion of its excess profits in the measure allowed by the property at its disposal. Further they have a right to a sum equivalent to 5 per cent. annual interest on the contributions they have paid, less any dividends they may have received.

If afterwards an excess profit still remain it returns to the central bank to which the agricultural bank was affiliated at the time of its dissolution.

If there be no such affiliation the available sums should be employed for the improvement of the small local farms, as determined by the general meetings of the society.

As regards the central banks of agricultural credit they are organized like the agricultural banks. To acquire legal status a central bank should apply to the presiding official of the county in which its managers meet. A central bank should be organized like an economic society of limited personal liability, and should act solely in the interest of the common aims of the agricultural banks affiliated to it. Recognized agricultural banks managed within the sphere of a central bank are alone admissible to participation in the latter.

Each bank should on admission subscribe at least 400 crowns to the central funds. A central bank is recognized when at least ten agricultural banks, having subscribed a total contributed capital of at least 6,000 crowns, belong to it.

An affiliated agricultural bank is rendered liable by the engagements of the central bank for a sum equal to at least thirty times its contribution on admission to the latter. But an agricultural bank may not on admission contribute so largely that the sum for which it can be made liable by the central bank is more than two thirds of the total sum for which its members can be made liable by its own engagements.

The right of agricultural banks to borrow depends partly on the sum for which they are liable. The maximum sum which an agricultural bank may borrow from the central bank may not exceed half the sum for which the latter may render it liable, together with half the total sum which its members are entitled to borrow.

Supposing certain persons have joined, in virtue of 1,000 hectares, a bank in which a hectare of land gives the right to borrow 75 crowns. The total sum they may borrow is then 75,000 crowns. If the bank they have joined be admitted to a central bank, contributing the least sum permitted, namely 400 crowns, it will be liable for engagements entered into by the

central bank for thirty times that sum, that is for 12,000 crowns. It will therefore have the right to borrow 6,000 crowns and 37,500 crowns, namely 43,50 crowns. Liability is thus slight relatively to the right to borrow.

The central bank procures loans for the affiliated agricultural banks by allocating direct loans by degrees, as available funds allow, and issuing them for notes of hand. The term for which the central bank lends borrowed funds may not be longer than that for which it has borrowed these funds.

A central bank can receive deposits from an affiliated agricultural bank on a current account. The central bank can also receive deposits from members of affiliated agricultural banks, and the king can give it the privilege of being able to open savings accounts with the public.

To increase public respect for the credit of the central banks, shares in the public debt to the amount of 100,000 crowns have been deposited in each of them, and will be used by them as a last resource.

Every central bank of agriculture is inspected by a delegate nominated by the presiding official of the county.

The managing committee of a central bank is composed of nine members elected by the general meeting for a period of two years, and six supplementary members elected for the same period. These managers choose from among themselves a president, a vice-president, and a manager-in-chief who is in charge of the current business of the bank and for whom the managers chose a deputy out of their number.

The central bank is represented legally not by all the managers but by the manager-in-chief or his deputy, with or without another manager.

At the meeting of the bank three auditors and two deputy auditors are chosen to inspect its books and the administration of the managers. They are chosen for two years and must make the inspection prescribed by law and report on it. They must report favourably or unfavourably on the managers. The report must be presented to the managers before 1 April, for the bank's annual meeting takes place in that month. Every affiliated agricultural bank is represented at this meeting by a delegate.

The aim of a central bank is to unite and to form into a powerful unit the agricultural banks. It must organize and superintend them, and forward their cause by propaganda and by contribution to the formation of new agricultural banks. A central bank and its affiliated agricultural banks form together one large financial establishement.

An agricultural bank can withdraw from a central bank after presenting a written resignation. This resignation is accepted at the first rendering of accounts which takes place after an interval of six months from the date at which it was proffered.

The managers of a central bank may expel an agricultural bank:

(1) which does not obey instructions as to its business in general and its accounts, or which alters its statutes in such wise that the managers of the central bank consider it to be no longer fit for membership ;

(2) which conducts its business badly, or makes the inspection of its transactions by the central bank too difficult ;

(3) which does not fulfil its engagements to the central bank;
(4) which discredits itself in the eyes of the public;
(5) which has been declared bankrupt;
(6) which joins another central bank.

The contributions of a resigning agricultural bank cannot be repaid to it until it has fulfilled all its engagements to the central bank, and unless the total funds of the latter are so increased by new contributions that, after repayment to the agricultural bank, they are no less than they were at the time of its resignation.

While a contribution remains on deposit dividends are paid on it as on other contributions.

If a central bank be dissolved the agricultural banks affiliated to it receive their shares of its excess profits, and also a sum which corresponds, together with the dividends received in the last ten years, to 5 per cent. annual interest on paid contributions.

The remaining excess profit should be used to improve the small farms within the central bank's territorial sphere.

Local agricultural banks and central banks receive State subventions for the costs of organization and administration, without obligation to repay them. Local agricultural banks thus receive two crowns for each of their members for the four first years after they have been approved, and one crown a member for the six succeeding years. The central bank of agricultural credit naturally receives larger subventions — 2,000 crowns for organizing expenses in each of the first two years, 1,000 crowns a year for the next four years, and 500 crowns a year for the succeeding four.

These subventions are relatively small, and the periods for which they are given are none too long. Therefore the banks are thrown back on their own resources. Thus in Sweden, all that has been set up, with the help of the experience of other countries, is a system which is based on the principle of mutual aid and has much potential development and importance.

MISCELLANEOUS INFORMATION RELATING TO CO-OPERATION AND ASSOCIATION IN VARIOUS COUNTRIES.

ITALY.

THE ACTION OF "L'ISTITUTO DI CREDITO PER LE COOPERATIVE" IN 1915. — *Istituto di Credito per le Cooperative. Relazioni e bilancio approvati dall'Assemblea degli azionisti dell'*11 *aprile* 1916. *XI esercizio.* Milan, Tipografia degli operai, 1916.

The institution called *L'Istituto di Credito per le Cooperative* was founded in Milan in 1904 by the initiative of the *Società Umanitaria.* Together with some important popular banks it proposes, in accordance with Article 3 of its statutes "to take part in the development of societies for co-operation in production, labour, consumption and credit, in the interests of labourers, employees, peasants, *métayers* and small workmen proprietors, in that it will facilitate by means of credit, the action of these societies". To attain this end it effects the following operations:

a) it discounts to co-operative societies, and to industrial workers and traders on probation, bills of exchange bearing two signatures, bills payable at sight, warrants, accounts for work certified as up to contract, accepted invoices, and mandates of public departments or private individuals known to be solvent;

b) it grants loans to co-operative societies, or advances money on their titles or credits, on the security of mandates of public departments or private individuals;

c) it makes recoveries and payments on behalf of co-operative mutual aid and improvement societies and other institutions to the credit of their salaried servants;

d) it lends securities to guarantee contracts and the execution of commissioned work.

Moreover the *Istituto* receives savings on deposit, in sums of not less than 10 liras, paying interest at the rate of 3 ¼ % net; it receives deposits of sums on current account at 2 ½ % net interest; it issues bonds bearing interest for fixed terms of six months or more, charging 3 ½ % net interest on those bearing for periods up to 12 months, 3 ¾ % on those for periods up to 18 months, and 4 % on those for periods up to 24 months or longer.

The last report shows that on 31 December 1915 its stock capital was 1,624,500 liras, made up of 21,660 shares of a nominal value of 75 liras, divided among 525 shareholders. At the same date the reserve funds amount-

ed to 447,065.20 lires, made up of an ordinary reserve of 72,065.20 liras and an extraardinary reserve of 375,000 lires.

During 1915 it effected 3,663 credit transactions with 408 co-operative societies, covering a sum of 22,348,772.61 liras, made up as follows :

2,410	transactions	with	165	co-operative	societies	for production and labour	for	15,152,704.56 liras
655	»	»	103	»	»	» consumption	»	3,140,363.59 »
123	»	»	12	»	»	» popular dwellings	»	2,658,636.58 »
25	»	»	1	»	»	» credit	»	43,446.45 »
85	»	»	13	»	»	» agriculture	»	988,892.00 »
365	»	»	114	»	»	» (various)	»	364,729.43 »
3,663			408					22,348,772.61 liras

The transactions may be classified according to their nature as follows:

929	transactions covering	1,200,835.22 liras	— discount of commercial bils
870	»	7,867,625,89 »	— direct loans guaranteed by mandates of public departments
146	»	6,282,691.50 »	— mortgage loans
1,179	»	4,980,763.38 »	— loans, advances
2	»	74,096.00 »	— deposits on security
537	»	1,942,760.62 »	— undertakings, guarantees
3,663		22,348.772.61 liras	

The geographical distribution was as follows :

Lombardy . . .	1,071	transactions	with	58	co-operative	societies	for	7,871,601.89 liras
Piedmont . . .	258	»	»	17	»	»	»	2,627,989.95 »
Liguria	38	»	»	8	»	»	»	1,207,425.00 »
Emilia	2,039	»	»	285	»	»	»	6,753,679.68 »
Tuscany . . .	146	»	»	29	»	»	»	2,727,129.01 »
Latium	19	»	»	7	»	»	»	144,600.00 »
Various . . .	92	»	»	4	»	»	»	1,016,338.08 »
	3,663			408				22,348,772.61 liras

On 31 December 1915 the balance of the deposits in trust was 2,754,464.75 liras — made up of 1,992,442.27 liras on current accounts ; 582,652.81 liras on savings accounts ; and 179,369.67 liras for bonds bearing interest.

On the same date the bills in hand amounted to 1,804,020 liras. The net profits for the year were 30,389 liras.

From 1 July 1904 to 31 December 1915 the *Istituto* effected 33,547 credit transactions covering a sum of 178,007,143 liras, which was divided among the different types of co-operative societies as follows : societies for production and labour — 22,757 transactions for 118,885,798 liras ; con-

sumers' societies — 4,370 transactions for 26,114,989 liras ; agricultural societies — 895 transactions for 4,541,423 liras; banks and co-operative credit societies — 954 transactions for 10,006,482 liras ; co-operative societies for building popular dwellings — 1,890 transactions for 15,319,979 liras ; and various co-operative societies — 2,681 transactions for 3,138,470 liras.

RUSSIA.

A NEW FUNCTION OF THE CO-OPERATIVE FUNDS IN FINLAND. — Gebhard Hannes : *Osnuskassaville nusi tarkeä tehtävä — Suomen Osnustoimintalchti*, Number 3, pp. 94-98. Helsingfors, 1916.

In consequence of the precarious circumstances of the small farmers and the rest of the non-landowning country population of Finland, the rural communities have in the last decade lost many strong-armed men, who have been drawn into the towns or even emigrated, in their search for a better livelihood. And yet there are still in Finland large areas of good land, which await only the farmer's plough in order to yield him, if not superfluity, yet the means for a quiet life and sufficient comfort.

The government and the Diet have sought to remedy this social evil in Finland, but hitherto the political circumstances of the country have paralysed all their efforts to ameliorate the condition of the numerous class of landless men.

Pending the more radical reforms which the legislature may undertake, several of the credit institutions of Finland have made arrangements to intervene between the landless class and the proprietors by offering to lend money to the former in order that they may buy their little farms, or buy land as yet not cultivated. The Central Credit Institute of the Co-operative Funds is among these institutions, having been financed to such end by the *Kaleva* Life Insurance Company.

The sum of money risked is not large, but one may hope that it will be increased if the experiment prove that the sums advanced have been invested profitably.

The Central Credit Institute of the Co-operative Funds has decided that loans will be made by the medium of the well-administered local co-operative funds, of which the machinery is excellently fitted to such a purpose. It is needless to say that it is incumbent on the management of the local fund to ascertain that the applicant for a loan is capable of cultivating a rural holding with success. No loans are made for the purchase of large properties.

These loans in aid of land settlement are more profitable than those offered for the same purpose by other credit institutions ; for the local co-operative funds are authorized to grant loans equal to 80 % of the purchase price of a holding, to be repaid in fifty years. For the first three years the borrower pays interest at the rate of 5 ½ %, afterwards at that of 6 %,

the additional ½ % being for amortization. The borrower can moreover repay the whole loan at any time.

Further the lender may not call in the loan unless the holding be sold or demised without leave from the co-operative fund, or so badly farmed that it is in danger of depreciation, or unless the owner neglect to insure against fire, or do not pay his interest punctually.

The management of the co-operative fund must employ an agricultural expert to draw up a scheme for the farming of the holding and advise the owner as to carrying it out. Every year the holding will be inspected by two experts of whom one must belongs to the management of the co-operative fund. The report of the experts will be inserted in that of the management.

The necessary funds for these loans are granted to the co-operative funds, over and above their ordinary credits, for 5 ¼ % interest in addition to the borrower's annual payment for amortization. If the central fund find that the management of the local fund has not ensured the borrower's observance of the conditions of his loan, it can, at a year's notice, exact total repayment of the sum entrusted to the local fund.

The local fund may not negotiate the borrower's bill without leave from the central fund, except at the risk of being called upon after three months to repay the sum negotiated. If relations between the central and the local fund be broken the bills held by the latter pass to the former.

When the local fund asks the central fund for a loan such a request must be accompanied by a note of the survey of the holding in question and a specification of the conditions of its purchase.

Thus, while safeguarding the interests of the funds, the management of the Central Credit Institute of the Co-operative Funds can take part in the work of building up in Finland new and prosperous farmers' homesteads.

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THE CENTRAL ASSOCIATION OF CO-OPERATIVE SOCIETIES FOR THE SALE OF FLAX. — *Вѣстникъ Кооперации* (*The Messenger of Co-operation*) nos. 9-10, 1915; and *Союзъ Потребителей* (*The Consumers' Union*) no. 6, 28 February 1916.

The recently formed Central Association for the Sale of Flax is, next to the Union of Siberian Co-operative Societies for the Sale of Milk which is much more important, the most powerful union of co-operative societies for the sale of agricultural products in Russia.

Founded in Moscow on 1 October 1915 it combines not only isolated co-operative societies but also groups of societies, and its activities extend to all the flax producing provinces in northern and central Russia, where, as is well known, the cultivation of this plant is in many places the principal branch of agriculture.

The greater number of the members of this Central Association are found in the provinces of Tver, Smolensk, Moscow, Viatka and Novgorod. Ac-

cording to the statutes the subscription for membership is 50 roubles in addition to an entrance fee of 10 roubles. As security to its creditors the association offers the total amount of its capital and property; and if this did not suffice for the fulfilment of its engagments the members would be obliged to pay the amount of a double membership subscription.

The activities of the Central Association consist in the sale of grain and flax fibre in home and foreign markets; and in the purchase, on behalf of the members, of flax seed, cereals, plants useful for feeding beasts and forage.

These operations of sale and purchase take place only when they are commissioned.

The association also undertakes the organization of lectures, and the publication of pamphlets and books, on the subject of co-operative societies dealing in flax, and the price at which this product sells.

In its first four months of its life — that is to say up to the end of January in the present year — the association sold to Russian firms ten waggon loads of flax for about 700,000 roubles, and in the same period it entered into business relations with foreign firms, in England, Italy, France and Japan. In the two latter countries experimental journeys for the opening up of business were even made.

In the single province of Pokoff the association bought 65,000 puds of flax seed, approximately worth 200,000 roubles. Before purchases are taken away the germinating power of the seed is tested in the Station for Controlling Sowing founded on the premises of the Agricultural Society at Moscow. There is thus a guarantee of the quality of the products.

All this is due to the initiative of the Central Association.

SPAIN.

THE ACTIVITIES OF MUTUAL CO-OPERATIVE AGRICULTURAL ASSOCIATIONS. — *Boletín de la Asociación de Agricultores de España*. Nos. 74 and 80. Madrid, July 1915.

A Competition of Agricultural Societies. — The Association of Agriculturists of Spain held from 15 August to 15 October 1915 its fourth competition for agricultural organizations, with the aim of developing the spirit of association in the rural population of the country. The three preceding competitions had shown the usefulness of this form of encouragement in developing agriculture; and this last occasion has clearly resulted in a further strengthening of the spirit of union among tillers of the soil, by means of prizes in kind granted to the best of those agricultural associations which are constituted according to the principles of co-operation or of mutual aid.

The organizations already members of the Association of Agriculturists of Spain, and those who joined it within the period of the competition, were allowed to compete.

For the competition the associations were divided into four classes :

1) pure or mixed associations operating in agricultural credit (banks, rural savings and loan funds) ;

2) pure or mixed associations having aims bearing on agriculture in general (experiment in and transformation of products and methods of culture ; common purchase of selected seeds, manures, machines, insecticides and anti-cryptogamous substances, and collective use of these machines and products ; co-operation in the production of farm materials or of the products derived from them, co-operation in the consumption, the centralization and the sale of products) ;

3) associations concerned with insurance (against fire, hail, frost, accidents, mortality among animals and so forth) ;

4) associations of the second degree, combining the agricultural organizations which they represent and bringing them into relation with each other (agricultural district federations and federations of agricultural syndicates).

All the associations qualified to compete had to add to their applications a detailed note showing the date at which each was constituted and that at which every service and institution annexed to it was formed, their mode of working, the results they had obtained, and the difficulties of every kind which they had had to overcome — all being corroborated by the relevant documents, statutes, rules, reports on the activities of the organizations and on their financial situations, and so forth.

At the end of last December the jury constituted by the association adjudged the rewards as follows.

In the first class the first prize (of 500 pesetas) was awarded to the Rural Bank of Los Santos (Badajos), and the second (of 250 pesetas) to the Agriculturists' Association of Morata de Tajuña (Madrid). Diplomas of honour were granted to the Rural Bank of Fuentes de Léon (Badajoz), to the Casbantino Agricultural Syndicate of Casbas (Huesca), to the Rural Savings and Loan Bank of Valencia del Ventoso (Badajoz) and to the Agricultural Syndicate of Angmero (Santander).

In the second class the first prize (of 500 pesetas) was adjudged to the Official Agricultural Chamber of Arenys de Mar (Barcelona), and the second (of 250 pesetas) to the Basque agricultural syndicate of St. Sebastian, " Alkartasuna ". Moreover diplomas of honour were given to the Agricultural Society of Alcira (Valencia), to the Agricultural Syndicate for Trade and Credit of La Villa de Hecho (Huesca), and to the Community of Agriculturists of Villafranca de los Barros (Badajoz), to the Agricultural Syndicate of Nuestra Señora de Ronda at Carpio de Tajo (Toledo) and to the Agricultural Syndicate of Bucudra (Cuenca).

The first and second prizes were of the same value in the third as in the earlier classes, and were awarded the one to the Official Agricultural Chamber of Santander, the other to the Agricultural Syndicate of Sariego (Asturias).

Finally the two prizes in the fourth class were granted the first to the Federation of Catholic Agricultural Syndicates of La Rioja (Logroño), and

the second to the Agricultural " Eurobrigente " Federation of Ciudad Rodrigo (Salamanca).

2. *The Development of some Agricultural Associations.* — This competition organized by the Association of Agriculturalists of Spain, which we have described, gives precise information as to the activities of the co-operative or mutual aid societies judged by the jury. A brief examination of the condition of some of these will allow an estimate of the progress they have made and their respective importance.

a) *Agricultural Credit.* The *Rural Bank of Los Santos,* constituted in April 1909 on the principle of the collective guaranteee of its members, now numbers 845 members, and has a capital of 10,350,652 pesetas. In view of the amount of the deposits in the Savings Bank — 627,625 pesetas — the Rural Bank has no need to call on the credit of the Bank of Spain. The total amount of the loans it had made was, at the time of the competition, 569,631 pesetas, distributed as follows: 24,633 pesetas in loans on personal guarantee ; 523,073 pesetas in mortgage loans ; 21,925 pesetas in loans on security.

The *Agriculturists' Association of Morata de Tajuna* was founded in 1889. It obtained from the municipality the administration of the control of weights and measures : and has since, out of its own funds and by the aid of loans obtained on good terms, spent 90,000 pesetas in meeting the municipal deficit ; 120,000 pesetas in placing streets and paths in order, constructing a slaughter-house and acquiring a supply of drinking water for the population ; 153,000 pesetas on subsidizing the construction of a railway, and so forth. In the last financial year examined the society's receipts reached the total of 589,266 pesetas, and its expenditure that of 586,591 pesetas; so that, on 1 July 1915, it had a balance of 2,675 pesetas.

Within itself it created in 1905 a mutual aid society, called " El Amparo del Agricultor ", to provide for the illness and burial of members. Since it began its activities it has received into its funds 18,266 pesetas, and spent, in providing aid and otherwise, 10,202 pesetas. On 30 September 1915 it disposed of the sum of 6,794 pesetas.

The association also founded, in 1914, a savings and loan bank, of which the development is increasingly marked. The savings deposited in the first ten months of its activities amounted to 9,700 pesetas ; and in the nine following months, namely up to 30 September 1915, they reached the sum of 20,700 pesetas, in others words their rate of increase was doubled. In these nineteen months the bank granted 182 loans, totalling 28,000 pesetas, of which 59 have already been repaid. The 123 loans still in being represent a sum of 17,700 pesetas. The rate of interest on loans is 6 %.

The *Rural Bank of Fuentes de Léon* was founded in September 1908. It is a joint stock society of unlimited liability. The maximum limit of loans which it can lend on personal guarantee or on security is 50,000 pesetas. When constituted it had 45 members and a capital of 3,814,585 pesetas. The membership is now 155 and the joint stock capital has reached 5,264,765 pesetas.

The sums needed for the granting of loans are provided by the depos-

its of savings received by this bank and by a credit of 200,000 pesetas at the Bank of Spain. From 1909 to 1914 the amount of savings deposits increased from 47,848 to 368,204 pesetas and the loans on personal guarantee from 3,500 to 46,770 pesetas. The loans on security, on the other hand, have been subject to great fluctuations and from 41,300 pesetas in the first year of the bank's activities have fallen to 16,300. The mortgage loans, which in 1909 were of 50,400 pesetas reached in 1914 the sum of 389,350 pesetas; and in the same period the reserve fund rose from 560 pesetas to 13,990. As indicated by these facts the services rendered to agricultural credit by this society have been of the first rank.

The *Agricultural Syndicate of Casbas* (*Huesca*) has been in existence since 1905 but has suffered various vicissitudes. It organized within itself a bank for savings and loans on security, a fund for insuring live stock, a co-operative medical and pharmaceutical service, a labour exchange, and a fund to provide against the illnesses of workmen ; and it is engaged in forming a co-operative veterinary service. It has an organ, the bi-monthly periodical, *La Hoja Casbantina*. It has at present 215 members ; its savings deposits reach a total of 10,500 pesetas; and the operations of its credit fund (purchase of manures, seeds and so forth) covered in 1915 the sum of 47,750 pesetas. The total of the loans in the same year was 66,620 pesetas. The fund for insurance against mortality among live stock, progressed as follows :

Year	Number of Insured Persons	Number of Animals Insured	Insured Value	Claims Met	Excess at Syndicate's Disposal
1908	79	193	100,520 pesetas	1 for 400 pesetas	303 pesetas
1915	225	426	164,672 »	4 » 1105 »	1,039 »

In 1912 however the fund paid indemnities for casualties to the value of 6,664 pesetas.

Finally in 1908 the number of warrants issued by the syndicate was 12 and their value 1,256 pesetas, and in 1915 there were 81 of them covering 9,990 pesetas.

The *Rural Savings and Loan Bank of Valencia del Ventoso* was founded in November 1907. It has at present 350 members and a capital of ten million pesetas. It accepts savings deposits, paying interest at the rate of 4 % to its members and at the rate of 3% to others; and such deposits reached in 1915 a total of 321,167 pesetas. Loans on personal guarantee and mortgages and loans on security represent only a very small sum and one which in the three last years has not varied — the former numbering 159 in 1915 and covering 114,168 pesetas, the latter being 273 in number and covering 732,534 pesetas. The reserve fund has increased from 25,954 pesetas in 1913 to 29,199 pesetas in 1915.

The *Agricultural Syndicate of Angmero* owns a rural savings and loan bank having deposits to the amount of 189,436 pesetas and having lent sums to the value of 63,935 pesetas.

b) *Associations generally interested in Agriculture.* — The *Official Agricultural Chamber of Arenys de Mar*, founded in June 1908 with 37 members, numbered 418 of them in 1914. The sums deposited in its savings bank are used as follows: 65 % is invested in public securities and the balance serves to make loans to the members for purposes of agriculture. The operations of the section for mutual aid covered in the first year a sum of only 41,941 pesetas, which in 1915 had so increased that it fell little short of 500,000 pesetas. The fund for insuring live stock, inaugurated on 1 April 1913, works on the system of fixed premiums, which can be increased, if necessary, to meet the claims for casualties. The following are the last figures obtained by this fund: insured capital — 46,875 pesetas, premiums paid up — 3491 pesetas, and claims met — 1760 pesetas.

The chamber has formed a centre for vegetable pathology and agricultural therapeutics which works under its direction.

" Alkartasuna", the agricultural syndicate of Quipuzcoa, was formed at the end of December 1905. Its social action was largely contributory to the formation of 30 other syndicates, which also were called " Alkartasunas " and which today are grouped together in the Catholic Agricultural Federation of Quipuzcoa; to that of the funds for insurance against mortality among live stock, known as " Anaitasunas "; and to that of the fund for provincial insurance. To understand the importance of this society it is enough to learn that in a year of bad harvest it provided the agriculturists and the syndicates with forage and other food for live stock up to the value of 300,000 pesetas. It has devoted more than a million pesetas to the purchase of manures, machines and forage. It has formed a rural fund, called " Donastiarra ", which makes loans at the rate of 3 ½ % interest, and a fund for relief in case of illness, accident and so forth. It numbers 500 members.

The *Agricultural Society of Alcira*, founded in 1892, has formed a Bank of Trade and Agriculture which borrows and which lends to its members. The society is especially occupied with the purchase and the distribution of manures and seeds. It sells some two million kilos of manure annually, the quality of the products being guaranteed by an analysis. It also provides a savings bank. The profits made by the members as a result of collective purchase of products useful to agriculture are paid into their accounts in this bank, and in the case of the decease of one of them the whole amount to his credit is handed over to his heirs or assigns. The society has further a section for mutual insurance of horses.

Its collective capital is 115,884 pesetas.

The *Syndicate of Hecho*, which has joint and unlimited liability, was founded in 1910 with 58 members and now has 167 of them.

The co-operative purchase of manures, afterwards granted to the members in the form of loans, has covered a sum of 22,300 pesetas in six years. The section for cultivating the soil and breeding has operated with 19,000 pesetas. The syndicate makes a point of developing the raising of crops for producing forage, and thus of encouraging breeding. The consumers'

co-operative section operated in 1914 with 184,485 pesetas, and brought to the syndicate a profit of 12,244 pesetas.

The syndicate has made 649 loans of the total value of 61,600 pesetas. Repayment is generally made after the harvest.

The section for insurance against mortality among live stock has had the following results :

Year	Number of Insured Persons	Number of Animals Insured	Insured Value
1913	93	240	58,810 pesetas
1914	107	252	64,420 »

The *Agricultural Syndicate of Nuestra Señora de Ronda* at Carpio de Tajo is a mixed syndicate of masters and labourers, comprising 60 of the former and 150 of the latter. The workmen members benefit by the advantages of mutual aid, and the syndicate further procures agricultural instruments for them on good terms. Its fund for insurance against mortality among livestock has insured 180 animals for 89,000 pesetas.

c) *Breeding and Insurance.* — The *Official Agricultural Chamber of Santander*, formed in January 1913, has 400 members. It publishes and distributes freely the *Boletín Agrícola y Pecuario*, and has already organized two agricultural exhibitions, in 1913 and in 1915.

Since 1 November 1913 the syndicate has kept a record of the pedigrees of cattle and a register of sales. In order to develop breeding it has imported bulls for breeding purposes of the best foreign cattle stocks.

On 30 April 1915 the syndicate opened the Provincial Fund for Insurance against Mortality among Cattle, which is destined to render the greatest services both to its members and to breeders in general.

The *Agricultural Syndicate of Sariego*, which has existed since June 1907, founded the first agricultural fund in the Asturias. In its eight years of life this fund has received deposits to the total value of 70,800 pesetas which have served to make loans, 1,567 in number, to the same amount.

The syndicate's section for insuring live stock insured, in 1908, 131 flocks or herds for 20,638 pesetas, and, on 1 January 1915, 216 for 34,117 pesetas. Its reserve fund is of 1348 pesetas.

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THE CATHOLIC MOVEMENT FOR AGRICULTURAL ASSOCIATION IN SPAIN. — *La Acción social navarra*, 8th year, No. 295. Pampeluna, 16 April 1916.

In proof of the development in rural Spain of the Catholic movement for agricultural association we will give some figures taken from a work published by Mr. Monedoro, who is well known for his propaganda in favour of this movement.

In the beginning of 1916 there were in Spain 18 Catholic Agricultural Federations in which altogether 1142 syndicates were grouped. The following table gives the number of syndicates comprised by each group:

Federations	Federated Syndicates
Federation of Astorga	76
" " León	60
" " Burgos	104
" " Rioja	120
" " Palencia	118
" " Santander	80
" " Ciudad Rodrigo	37
" " Valladolid	98
" " Soria	41
" " New Castille	78
" " Navarre	90
" " the Asturias	60
" " Aragon	90
" " Segovia	15
" " Salamanca	30
" " La Mancha	20
" " Murcia	15
" " Biscay	10
	1142

The five last mentioned federations are of recent foundation, which explains the relatively small number of federated syndicates which they comprise. At present groups are being organized which will constitute Catholic Agricultural Federations of Orensa, Tuy, Extremadura, Valencia and Zamora.

The syndicates forming these federations are all professedly Catholic in character. Most of them devote their activities to co-operative credit, and as a rule they also make collective purchases of agricultural machines, seeds and manures.

Part II: Insurance and Thrift

GREAT BRITAIN AND IRELAND.

CO-OPERATIVE HORSE INSURANCE SOCIETIES.

(*Concluded*).

§ 4. The Coveney New Cattle Club.

This society was founded at Coveney in Cambridgeshire in 1884, and was registered in 1891 as a cattle insurance society under the Friendly Societies Act. It was established " to provide by voluntary subscriptions " for making good any loss that the members may sustain by the death " of their cattle or stock, " and one of its rules lays down that " all stock " that may die from accident, malicious injury or any cause whatever, " shall be paid for the same as if the stock had died a natural death, except " it be through the wilful neglect of the owner ".

Constitution of the Society. — The society insures horses, mares, foals young horses, cows, calves, bullocks, and young stock. It consists at present of 24 members, all of whom reside in the parish of Coveney or close to its borders, within a radius of about two miles of the registered office. All of them, except one labourer, are engaged in farming land, and about 15 of them are of the status of smallholders. The society has three trustees, is managed by a committee consisting of the treasurer and four members, who are elected annually, and has a secretary, who receives a salary of £1 10*s.* per annum. All of these officials are farmers, except that one of the trustees is the sub-postmaster and the treasurer is an inn-keeper.

Payment of Entrance Fee and Premiums. — A new member is admitted by the vote of the majority of the members present at any meeting, and pays 1*s.* entrance fee and 6*d.* in the £ on the value of the animals entered at that time. The society meets once a quarter, and each member

is required to pay his contribution at the quarterly meeting at the rate of 1 ½*d.* in the £ per quarter on the value of the stock he enters. For brood mares, however, 2 ½*d.* in the £ is paid. A member is not required to insure the whole of his stock ; he may insure any animals he pleases and keep other animals uninsured. No mark is placed on an insured animal, but as the members of the society all live within a short distance of one another, there is practically no difficulty in identifying an insured animal. Each animal offered for insurance is inspected by the committee to see that it is sound, but not valued by them at that time, the owner being allowed to place his own valuation on the animal and to pay his insurance contribution according to the value he himself has named. When the animal falls ill or dies, the committee inspect it again and estimate its value at what they think it was worth before it fell ill, and the owner is paid compensation at 17*s.* 6*d.* in the £ (that is seven-eighths), on his own valuation or on the committee's valuation, whichever is less. The committee's valuation is final and is practically never disputed.

Age of Insured Animals. — There is no limit as to the age from which or up to which a calf or cow can be insured. If a cow is insured, compensation is paid for the calf if it lives for 48 hours and then dies, but the calf must be separately paid for on the next club night. If a member buys a calf not already insured, he can give ten days' notice and have the calf insured on the next club night, however young it be.

No horse above the age of seven is accepted for insurance for the first time, but once a horse has been insured it remains insured up to any age. If a brood mare is insured, the insurance covers her foal also (even if it does not live for 48 hours, provided it is born after 1 January), until the midsummer club night, when the foal has to be entered and paid for separately. If a member purchases a new foal, it can be insured on the next club night on 10 days' notice, however young it be. The difference in the treatment of calves and foals is partly due to the fact that a cow pays as insurance contributions per quarter only 1 ½*d.* in the £, whereas a brood mare pays 2 ½*d.* in the £. The extra 1*d.* per £ charged on a brood mare begins at the midsummer quarter and continues for three quarters thereafter, whether the mare be in foal or not. An owner can alter the valuation of any animal at any quarter, and sometimes a member raises his valuation of a mare for the quarter in which she is going to foal and reduces it again after foaling. Many members insure their animals at less than their full value, partly in order to avoid disputes as to valuation and partly in order to have a lower insurance contribution to pay.

Income and Expenditure of the Society during recent Years. — During the years 1904-1914 the number of members fell from 27 to 24, and the number of cattle insured rose from 37 to 75, and of horses from 45 to 50. On the average of the eleven years the number of animals insured was about two cattle and two horses per member, but one member insured as many as eight horses and thirty cattle. The average number of animals insured was 108, of which 53 were cattle and 55 were horses. The average number of deaths among the insured animals was 3.5 per annum

which gives an average death rate of 3.1 per cent. per annum. The average amount paid on claims was £8 1*s.* per animal that died and 5*s.* 2*d.* per animal insured; but as the club received an average of 11*s.* per carcass, its net loss was £7 10*s.* per animal that died or 4*s.* 10*d.* per animal insured. The amount received in insurance contributions averaged 8*s.* per animal insured and was much more than sufficient to cover the net losses. The average expenditure and income for the eleven years have been as follows:

Expenditure —

	£	*s.*	*d.*
Paid on claims	27	17	9
Expenses of management	2	8	6
Total expenditure	30	6	3

Income —

	£	*s.*	*d.*
Insurance contributions	43	8	5
Entrance fees		1	10
Interest	5	16	9
Sale of carcasses	1	16	3
Total income	51	3	3

Thus the society saved on the average nearly £21 a year, and its reserve fund during these eleven years increased from £136 to £365, of which at the end of 1914 £321 was deposited in the Savings Bank. It is obvious, therefore, that it is in a flourishing financial condition and, as its reserve fund now amounts to £2 18*s.* per animal insured, which equals more than ten times the average loss of the eleven years, there is now very little risk that the members will ever have to suffer under the rule which lays down that "in case any loss should occur and there should not be funds enough to meet the demand, the society to pay at next quarter night, so far as the money will go, so that all may be equal at the end". Unlike most other societies, this club has no rule requiring the members to pay an extra levy in order to make up losses in case of a deficiency.

Experience with regard to Cattle and Horses compared.— It is interesting to compare the experiences of this society as regard cattle and horses. The average death rate among cattle has been 2.8 per cent. per annum, whereas among horses it has been 3.6 per cent. The cattle are all paid for at the rate of 1 ½*d.* per £ per quarter, that is 2 ½ per cent. per annum, and as the owner receives, if the animal dies, only seven eighths of the valuation on which he pays, this rate corresponds very exactly with the actual average experience of the society. For a brood mare 2 ½*d* per £ per quarter is paid, that is, about 4 per cent. per annum, while other horses pay 1 ½*d.* or 2 ½ per cent. Of the 49 horses insured last July, 23 were

insured as brood mares at 2 ½*d.* per £ per quarter and 26 at the lower rate of 1 ½ *d.* per £ per quarter. Broadly speaking, the result of this plan of charging an extra 1*d.* per £ per quarter on brood mares is that the insurance contributions for all horses taken together correspond fairly well with the average experience of the society, so that it makes the rate of insurance on horses fair as compared with the rate of insurance on cattle.

Taking all the horses together the average value at which a horse was insured was £21, the average for brood mares being £25 and for other horses £17. The highest value at which a horse was insured was £35, although some of them are actually worth £40 or more. Practically all of the horses are engaged in ordinary farm work.

It is interesting to note that while the average value at which a horse was insured was £21, on which at seven eighths £18 8*s.* would be payable in case of death, the actual amount paid on the average for the eleven years was only £11 2*s.*, which means that the death rate was higher among the less valuable animals, that is the foals and the old horses, than among the more valuable, that is the horses in the prime of life. This accounts for the fact that although the rate of premium charged by the society corresponds fairly closely with the actual average death rate per cent., yet the actual payments on losses have been much less than the premium income and the society's reserve fund has increased rapidly.

§ 5. The Isleham Cattle Club.

In the year 1884 a number of smallholders at Isleham, a rural parish near the eastern border of Cambridgeshire, founded a horse insurance club, which in 1914 consisted of 41 members, almost all of them smallholders or market gardeners, and insured 83 horses, an average per member of 2 ; though one member insures as many as 7. The horses are mainly used for farm work, or for carrying vegetables to the market in light carts. They comprise 45 mares, 9 horses, 11 ponies and 18 yearlings, colts and foals. The insured horses are valued twice a year, in April and October, by two valuers, a farmer and a smallholder. A new member pays 1*s.* 3*d.* entrance fee, and the premium is 2*d.* per £ per quarter on the insured value of each animal. No animal can be accepted until it has been in the possession of its owner for 14 days, and has been passed by the valuers, and no new member can receive any benefit from the club until he has paid three quarters' subscriptions. Should an insured animal die, the society pays the owner three fourths of the value placed upon it at the last valuation, so that the insurance contribution of 2*d.* per £ per quarter, or 3 ⅓ per cent. per annum on the insured value, equals nearly 4 ½ per cent. on the amount payable as compensation in case of death. There is no extra charge made for foaling risks. No limit is fixed as to the age of an animal on admission for insurance, but no horse is admitted unless it is worth £8. The highest value at present placed on any insured horse is £34, and the average value of the 83 horses is £19 14*s.* So far as can be made out from the accounts,

the average death rate of the past five years has been 3.3 per cent. per annum. The funds of the society are kept in the Post Office Savings Bank, and during the five years there has been an average annual profit of £17. The reserve fund now amounts to £278, which is equivalent to more than 10 years' average payments on claims, so that the society is in a very sound financial position.

§ 6. The Haddenham Cattle Insurance Club.

This club was founded in 1888 at Haddenham, a rural parish in Cambridgeshire. It insures both horses and cattle. Its operations embrace 6 parishes, and it is managed by a committee of 23 members. There are now altogether 122 members, mostly smallholders, some of whom have risen from the position of labourers. A new member is not entitled to receive any benefit from the society until he has been enrolled for 3 months. The entrance fee for a horse is 2*s.* and for a cow 1*s.* 6*d.* The animals insured are not valued, except when they fall ill or die, when the valuers, consisting generally of the members of committee for the village concerned, inspect the animal and fix its value which is paid in full to the owner if the animal dies, but subject to a maximum of £10 for a cow and £15 for a horse. Each member pays a monthly subscription of 4*d.* for a cow and 6*d.* for a horse. The rules give the committee power to make a levy of 1*s.* per head of stock whenever necessary, and on several occasions in the club's history an extra levy has been made. In 1913 the society insured 240 horses and 187 cattle, the largest number of animals insured by any one member being 10 horses and 4 cattle. During the previous 10 years the average death rate per cent. per annum was 4.5 for horses and 2.5 for cattle. The average amount paid per animal that died was £8 8*s.* for a horse and £8 10*s.* for a cow, equivalent to an average annual charge of 7*s.* 6*d.* per horse and 4*s.* 3*d.* per cow. As the amount received in monthly contributions was only 6*s.* per horse and 4*s.* per cow per annum the income from this source was not sufficient to cover the expenditure in payment of claims. The only other expenditure the society has had to meet has been costs of management, which have been small, as the officers of the society all render their services gratuitously, and for the 10 years the costs of management averaged only 3½*d.* per annum per animal insured. The total expenditure averaged £126 3*s.*, and as the total income, including monthly subscriptions, entrance fees and receipts from the sale of carcasses, averaged only £122 2*s.*, there was an average loss per annum of £4 1*s.*, and during the 10 years the net assets of the society fell from about £102 to £61 9*s.* 6*d.*

§ 7. Average death rate among horses.

If the experience of theses 6 societies as regards horses is considered together, the following results are obtained, as regards the death rate to

be expected, that is, the percentage of animals insured on which claims are likely to have to be paid in an average year.

Society	Class of Horse	Numbers of years' statistics	Average number of horses insured	Average number of claims paid per annum	Actual average death rate per annum
Newark	Non-agricultural	12	170	3.9	2.3
Bedworth	,, ,,	6	124	8.0	6.5
Isleham	Agricultural	5	61	2.0	3.3
Haddenham	,,	10	223	10.0	4.5
Coveney	,,	11	55	2.0	3.6
Soham	,,	11	206	8.3	4.0
	Total — all six societies		839	34.2	4.1
	Total — four agricultural societies		545	22.3	4.1

So far as these statistics go, they seem to show that an average co-operative society, consisting mainly of farmers and smallholders and insuring chiefly horses engaged in ordinary farm work or light road-work, has reason to expect that, if managed on sound lines, its average annual casualty rate will be about 4 per cent. per annum. This is a good deal higher than the 2.6 per cent., which is the actual average casualty rate among cows, according to 3 years' experience of 88 cow insurance societies insuring 9,882 cows and calves per annum. But it is to be remembered that in the ordinary course a cow, if it continues healthy, is fattened and sold for human food, in which case no claim is payable by the society; whereas a horse is only slaughtered when it can work no longer, and therefore every insured horse, unless sold by its owner, will sooner or later have to be paid for by the society. On the other hand, it seems that farmers and smallholders generally manage to sell their horses before they are past work, a practice which reduces the number of animals that have ultimately to be paid for on claims. The hauliers of Bedworth sometimes buy these half worn out animals; and considering the age and class of horse insured in their society, and the heay work many of them have to do in hauling loads of coal, their average casualty rate of 6.5 per cent. per annum is really low. The very low death rate of 2.3 per cent. per annum at Newark is due to the fact that a number of the insured horses are valuable animals, carefully looked after by their owners, and that the company's veterinary surgeon rejects all but thoroughly healthy horses, and does his best to cure those that fall ill.

§ 8. Average amount paid on claims.

As regards the amount payable in claims the following results are obtained for the four agricultural societies.

Society	Maximum valuation	Proportion of insurance value paid on claims	Number of years' statistics	Total number of horses insured multiplied by years of insurance	Total number of claims paid on horses	Total amount paid on claims	Average amount paid	
							Per horse that died	Per horse insured
	£					£	£ s. d.	s. d.
Isleham . . .	34	Three fourths.	5	305	10	123	12 6 0	8 1
Haddenham. .	15	The whole.	10	2,230	100	838	8 8 0	7 6
Coveney . . .	35	Seven eighths.	11	608	22	244	11 2 0	8 1
Soham	35	Seven eighths.	11	2,265	91	1,290	14 4 0	11 5
Total . . .	—	—	—	5,408	223	2,495	11 4 0	9 3
Total for three societies (omitting Haddenham)				3,178	123	1,657	13 10 0	10 5

From the experience of these societies it is obvious that, as might have been expected, the rate of mortality is higher among the less valuable animals, including the foals and old horses, which are more liable to sickness and death, than among the more valuable animals, most of which are in the prime of life. The figures seem to show that an agricultural society, which limits the value for insurance to £35 in the case of any horse and pays on claims seven eighths of the insurance value, is not likely to have to pay on the average as much as £15 per claim. If it had to pay as much as this on 4 per cent. of the horses insured every year, its average annual payment on claims would be 12*s.* per annum per horse insured. The actual payments on claims have, for the three societies, omitting Haddenham, which does not pay more than £15 on any horse, averaged 10*s.* 5*d.* per annum per horse insured.

§ 9. System of valuation.

An ordinary store pig generally increases rapidly in value as it gets older and fatter, and it would not be fair to pay compensation on its death without regard to its value at the time. Accordingly, almost all pig insurance societies have a system under which an insured pig is valued by

a committee of the society at the time it falls ill or dies or meets with an accident, and the value then placed upon it by the committee determines the amount to be paid as compensation to the owner in case of its death. A cow's value also changes a good deal during the year, according as it is in calf or in milk or not, so that most cow insurance societies have also adopted the same plan. An ordinary working horse, however, does not change in value very rapidly, and most horse insurance societies find it best to have all the insured horses valued once or twice a year and to accept the value placed on any horse at one of those periodical valuations as determining the amount of compensation payable to its owner in case it dies before the next valuation. The Newark Company has its valuation made once a year, in December, by its veterinary surgeon and directors, who go in pairs or threes and inspect the horses on their owners' premises without notice. The Bedworth Society makes its members bring all the insured horses to one place once a year, in May, and accepts the valuation put upon them by the veterinary surgeon. At Isleham the horses are assembled twice a year, in April and October, and are valued by two men nominated by the society. At Haddenham, which pays only £15 as a maximum, a horse is valued only when it falls ill. At Coveney, each member is allowed, on entering a horse for insurance, to fix the amount he will claim if it dies ; but if it does fall ill or die the committee estimates its value when it was last in good health, and the amount of compensation payable is determined by the owner's valuation or the committee's valuation, whichever is less. At Soham the horses are all valued twice a year, in April and October, by the two stewards and the secretary, who go round and inspect the animals on their owners' premises.

In order to save the funds of the society from being exhausted by a few heavy claims it is usual to fix a maximum (say £35) above which a horse must not be valued for insurance purposes, however valuable it may be. In some societies also, the owner is allowed to put his own value for insurance purposes on the horse, so long as this value does not exceed its market value as estimated by the committee. This practice has the advantage of avoiding disputes between the owner and the committee's valuers as to the actual value of the horse, and encourages men to insure who would not care to pay the insurance contribution (fixed as a percentage of the insurance value) on the full value of the animal, and who are content to accept less than the full value as compensation in case of its death.

§ 10. Method of charging insurance contribution.

In the case of pigs and cows whose value changes somewhat rapidly, it is generally found most convenient to charge a flat rate of insurance contribution, which does not vary with the value of the animal; but in the case of horses, when a society has fixed a value for each horse separately, it is easy to make the contribution vary with the value of the animal by charging a proportionate rate, a much fairer plan.

The Newark Company has a scale of rates which makes the premium payment about 5 $^{5}/_{6}$ per cent. per annum on the insurance value of each horse, but this rate includes a profit for the shareholders.

At Bedworth the insurance contribution is payable fortnightly, and is charged at the rate of 1*d.* per week for every £5, or part of £5, at which a horse is valued, equivalent to about 4 ⅓ per cent. per annum on the insurance value, or about 6 per cent. on the amount payable as compensation in case of death, which is three fourths of the value for insurance. The death rate at Bedworth is exceptionally high, but at this rate the net assets of the society have increased in 6 years from £181 to £300.

At Isleham a member pays 2*d.* per £ per quarter on the insurance value of each animal, equal to 3 ½ per cent. per annum on the insurance value, or nearly 4 ½ per cent. on the three fourths of the insurance value actually payable as compensation ; the society's net assets have increased in the 5 years from £188 to £272.

At Haddenham the society pays the full value of a horse that dies, subject to a maximum of £15, and charges a flat rate of 6*d.* a month, say 6*s.* a year, for each horse ; but its net assets have fallen off, and its experience shows that this rate does not cover the losses.

At Coveney the insurance contribution is 1 ½*d.* in the £ per quarter on working horses and 2 ½*d.* on brood-mares, equal to 2 ½ per cent. and 4 $^{1}/_{6}$ per cent., respectively, per annum on the insurance value, and to about 3 and 5 per cent., respectively, per annum, on the seven eighths of the insurance value payable as compensation. Under this system the net assets of the society have increased in 11 years from £136 to £365.

At Soham the rate is made to vary with the state of the finances, the object being to keep the reserve fund at about £600. During 10 years in which the rate was 1 ½*d.* in the £ per quarter, equivalent to 2 ½ per cent. per annum on the insurance value, and to about 3 per cent. per annum on the amount of compensation payable in case of death, the net assets rose from £420 to £775. The rate was then reduced to 1*d.* per £ per quarter, equivalent to 1 $^{2}/_{3}$ per cent. per annum on the insurance value and to about 2 per cent. per annum on the seven eighths payable in case of death ; but as at this rate the reserve fund fell below £600, the rate of contributions has recently again been raised to 1 ½*d.* per £ per quarter.

From the combined experience of these societies, the best system would appear to be to have all the insured horses valued twice a year by a valuation committee nominated by the society, with power to accept the owner's own valuation, provided it does not exceed what the committee consider to be the true market value of the animal at the time. The value for insurance purposes or "insurance value" should in no case exceed £35, and should always be fixed in even pounds, as is done at Soham. This makes the accounts much simpler, and each owner can then easily calculate the amount of his quarterly contribution for himself. The compensation payable by the society to the owner on any horse that dies should be seven eighths of the insurance value as fixed at the last half-yearly valuation. The insurance contribution should be payable quarterly

at the rate of 2 ½*d.* per £ per quarter for brood-mares, and of 1 ½*d.* per £ per quarter for all other animals, calculated on the insurance value of each animal as fixed at the last valuation.

The experience of the agricultural societies described above shows that, under such a system, an ordinary rural society may expect that its average income will exceed its average expenditure, and that it will soon accumulate a good reserve fund, which will secure it against the risk of having to make special levies in bad years, and will bring in a substantial income in interest.

When the reserve fund has reached a satisfactory figure the society will be in a position to increase the privileges it offers its members, for instance, by raising the maximum allowed as "insurance value", or reducing the age at which young animals are accepted for insurance, or by lowering the rate of insurance contribution charged to old members, as has been done by the Coveney Society.

As shown above, the proposed rate of 1 ½*d.* per £ per quarter is equivalent to only about 3 per cent. per annum on the amount of compensation actually payable, whereas the actual average death rate is about 4 per cent. per annum. The reasons why a rate of contribution lower than the actual death rate is, as a matter of experience, found sufficient, are that, besides these insurance contributions the insurance fund receives an income from entrance fees, interest and sale of carcasses; and that, as already pointed out, the death rate among the more valuable animals, which pay larger insurance contributions, is lower than among the less valuable animals, on which smaller amounts of compensation have to be paid by the society.

§ 11. Management expenses.

At Isleham the secretary is paid 15*s.* a year, the treasurer 10*s.*, and the valuers £2; nothing is paid for rent, and the management expenses come to about 10*d.* per annum per animal insured. At Haddenham the officers all work for nothing, and the clerical expenses come to only about 3 ½*d.* per annum per animal. At Coveney the secretary receives £1 10*s.* per annum, and the expenses of management altogether average £2 8*s.*, 6*d.*, or about 6*d.* per animal. The much larger society at Soham pays its secretary and treasurer £3 a year and its stewards about £6, including travelling expenses, and the total costs of management average less than 6*d.* per annum per animal insured.

It would seem advisable for a new society to keep a separate account for management expenses, and to charge at first a management contribution of 3*d.* per quarter (1*s.* a year) per animal insured. This should enable it to pay a fair remuneration to its secretary. If, at any time, the balance to the credit of the management fund were unnecessarily large, the rate of management contribution could be temporarily reduced.

§ 12. Society's veterinary surgeon.

Both horse and cow insurance societies might well follow the example of the Newark Company and the Bedworth Society, and employ a veterinary surgeon who, for a contract payment, would be bound to help in passing and valuing the animals offered for insurance, and to supply veterinary attendance and medicine free of charge for all insured animals, whenever his services were required. Under such a system the members would get veterinary services at a lower rate than that at which they would have to pay if they employed the surgeon individually, but, of course, it would be necessary to increase the charge for management expenses by such a sum as would be sufficient to meet the contract price agreed upon between the veterinary surgeon and the society.

§ 13. Comparison with insurance companies.

Under the system above described a smallholder owning one horse will pay altogether to his society, including management contribution and entrance fee, less than 3 ¼ per cent. per annum on the amount he will actually receive from the society if his horse should die from disease or accident. For instance, on a horse worth £20 he will pay per quarter 2*s.* 6*d.* as insurance contribution and 3*d.* as management contribution, or altogether 11*s.* a year, and he will receive £17 10*s.* if it dies. He will be able to insure his young stock at a similar proportionate rate and to keep his old horse under insurance at a gradually decreasing cost, so long as he does not sell it, until it dies on his hands. He will also have reason to expect that his society will gradually build up a reserve fund which will ultimately enable it to reduce the rate charged to him, possibly to 2 per cent. per annum or less, as is the case now in the Coveney Society, where a member of five years' standing now pays only 6*s.* 8*d.* a year altogether for the insurance of a £20 horse.

If he insured his horse with an ordinary live stock insurance company he would have to pay an annual premium of 5 per cent. on the amount payable in case of death. (When a number of horses are insured by the same owner the usual rate is 4 per cent.) That is to say, if he insured to get £17 10*s.* he would pay 17*s.* 6*d.* a year as compared with the 11*s.* a year he would pay under the above scheme to his co-operative society. This would be the rate payable only while his horse was in the prime of life ; when it got to be over 10 or 12 years old the insurance company would charge a considerably higher rate of premium. He would also find it difficult to get the company to insure any of his young stock till they were 2 years old ; nor could he look forward to a future reduction in his rate

of premium as he could if his society were successful in accumulating a reserve fund.

Co-operative insurance is, according to the experience of the co-operative horse and cow insurance societies in this country, much cheaper than joint stock insurance, for the following reasons. An ordinary live stock insurance company has to expend large sums in the provision of offices, staff, commission, travelling expenses, veterinary fees, and dividends to shareholders. To meet this expenditure it has to charge as premium at least 50 per cent. above the actual amount required to meet the losses payable on claims. On the other hand, a co-operative insurance society has no commission or dividends to pay, and has to meet only a very small expenditure on rent and staff, as its operations cover only a small area ; and the members of committee, secretary, stewards, etc., are willing to carry out all the necessary duties of management either without remuneration of for very small salaries. Much, therefore, of the work which has to be paid for by an insurance company is done for nothing by members of the society in order to help their fellow members.

Again, a distant impersonal insurance company has difficulty in securing itself against fraud or carelessness on the part of the insurers. In the case of a co-operative insurance society, however, as the members all live within a short distance of each other, and are interested personally in seeing that the rules of the society are properly carried out, they exercise the strong pressure of local public opinion on any member who may be inclined to neglect his animals, or to act unfairly by the society, so that the casualty rate in the case of a co-operative society is generally much lower than in the case of a large live stock insurance company. This makes it possible for the society to charge a considerably lower premium than a company has to charge in order to pay the claims made upon it. Another advantage is that a small co-operative insurance society has much less difficulty than a distant company in arranging for a fair valuation of the insured animals, so that no insurer who makes a claim shall receive more than is justly due to him.

(*Concluded*).

MISCELLANEOUS INFORMATION RELATING TO INSURANCE AND THRIFT IN VARIOUS COUNTRIES

BRITISH INDIA.

CATTLE INSURANCE SOCIETIES. — *The Agricultural Journal of India.* Calcutta, April 1916.

Such societies have now been in operation in Burma for the last five or six years and they have so far proved eminently successful. In view of the great importance of the subject both from the agricultural and co-operative standpoints, the United Provinces government is anxious that a few experimental societies should be started under favourable conditions and the scheme given a fair trial. Accordingly, after careful deliberation, a small number of societies have been registered in the Mainpuri District, and it is hoped that in other suitable localities co-operators will endeavour to establish a few societies in order to gain experience.

Model by-laws and other particulars may be obtained on application to the registrar, and his staff will give all necessary aid. Societies should be organized only in localities where credit societies have been successfully working and the people are familiar with co-operative ideas. Also only those localities should be chosen in which the cultivators use good plough cattle and appreciate their value. Tracts where the agriculturists trade in cattle, frequently buying and selling them, should be avoided. The members should belong to one village or to two or three contiguous hamlets. They should insure as many as possible of their eligible cattle. At present insurance is confined to healthy bullocks and male buffaloes between the ages of 4 and 12 years. Premiums have to be paid every six months (or the insurance lapses) on the value of the animal which is assessed by a valuation committee appointed by the society. The rate of premiums has for the present been fixed at one pice per rupee for the six months. This may have to be altered with experience. If the animal dies during the course of the six months, the owner will get back two thirds of its value after deducting whatever he may be able to realize by selling the hide, etc. Provision is made to secure preventive measures in case of epidemics and also for treatment for sickness. No compensation is given if the animal dies through the neglect of the owner. For the present the cattle insurance society will bank with the district or central bank of the locality, and if, at the end of the experimental stage of the few selected societies, there is any loss, it will be made good by the government. If the scheme

proves successful and the number of societies increases, a re-insurance society will be organized. This cannot however be done for a year or two or until cattle insurance societies are in operation in different parts of the province, so that the risk can be spread out and thus minimized.

In Burma the area of a cattle insurance society is ordinarily limited to one village. Membership is practically confined to the members of a credit society. This rule has been adopted in order to minimize the chances of dishonesty on the part of the cattle insurance society in its dealings with the re-insurance society. Any such dishonesty can now be punished by the closing of the credit society, which is bound to prove a severe misfortune to all its members. Members are encouraged to insure all their eligible cattle, but they are not compelled to do so. Plough bullocks and buffaloes between the ages of 4 and 12 are insurable. The valuation is made every six months when the premium has to be paid. The present rate of premium is five per cent per annum. On the death of an insured animal an indemnity of two thirds of the value assessed, less the price of the hide and carcase, is paid out. The valuation work seems easy. The cattle are more or less of the same value if of the same age. In other words the standard of care bestowed on the animal from the time of its birth is uniformly high and there are not many different breeds to be taken into account. It may also be noted that the meat of a dead animal is eaten by all classes of Burmese. The price of the carcase is thus a substantial sum and the indemnity payable is appreciably reduced thereby.

A re-insurance society has been organized for the whole of Burma of which the segistrar is at present the honorary and *ex-officio* manager. Half the premiums collected by the insurance society are deposited with the local credit society. The other half is sent to the re-insurance society along with a list and particulars of cattle insured and their valuation every half year. If any animal dies, half the indemnity that has to be paid comes from the re-insurance society, the remaining half has to be made good from the funds of the primary insurance society. The latter has two separate funds, *viz.*: (1) the general fund consisting of all premiums realized during the year, and (2) the reserve fund consisting of fines, entrance fees, donations, profits of previous years, etc. In the event of the funds received as premiums during the year proving insufficient to meet the claim of half the indemnity payable by the primary society, half of the reserve fund may be drawn upon in any one year with the registrar's sanction to meet the deficiency. If the funds are still insufficient the indemnities for all animals that have died during the year will be proportionately reduced.

So far no society has suffered a deficit. The re-insurance society was organized only about a year ago. It banks with the Upper Burma Central Bank, which is the Provincial Co-operative Bank for Burma.

In Burma only a few tracts have any district or central bank. The link between the Provincial Bank and the primary credit society is the "Guaranteeing Union". A cattle insurance society becomes a member of the local union in order to secure supervision from it, but undertakes no financial responsibility for it.

CANADA.

FIRE HAZARD OF CANADIAN GRAIN ELEVATORS. — *Monetary Times.*

Perhaps there is no class of risks which, as a whole, has undergone such changes in regard to construction and handling of grain and consequent reduction in rates and fire waste as that of the grain elevator. Insurance rates on terminal elevators in the dominion to-day run from twenty-five cents to over $ 5,00 per $ 100, and on grain in the storage tanks as low as fifteen cents. More than 75 per cent of the whole is written at the lower rate, while twenty-five years ago rates ran from $ 2,50 to over $ 5,00 per $ 100. This was the statement of Mr. J. Calder of the Canadian Fire Underwriters' Association. Dealing with fire hazards, Mr. Calder said in part : " The poorer class of line elevators is found to be the older ones situated east of the Great Lakes, especially in districts where the shipment of grain has become less year by year. The following conditions, or a large part of them, generally obtain : post foundations open under floors, shaft bearings supported on wood beams soaked with oil, stove heating with a pipe chimney through the roof, coal oil lighting and an office inside the main building which is too often patronized as a smoking room. Without fire protection these elevators form most undesirable risks. There is a large proportion, however, of the class, especially in the west, when these conditions do not as a rule exist, and if the business done is good they are in every way good risks ".

In terminal elevators. — The following hazards in terminal elevators, which Mr. Colder outlined in detail, he said, applied to all wood houses where they exist. Where cupolas are built and rest upon the top of bins there is always a hazard in operation when partly empty through the throwing of shafting out of alignment. Cupolas should be built on separate foundations from the ground up. Elevators should have basements well lighted with the elevator boots in plain sight so that they may be properly oiled. Placing elevator boots under floors out of sight and lubricating them through long tubes is unsatisfactory, as the tubes are liable to become choked with dust and the oil frozen in winter. The rapidity with which fire may reach the top of the working-house is a serious one and should be guarded against as far as possible. The elevator leg, boots and spouting should be of metal and the cope or belt drive, passenger elevator and stairs should be in a tower outside and cut off by automatic fire doors, making a complete cut off between the first and bin floors.

Lighting other than electric is not to be considered, and yet there is always a limited amount of hazard in this form of lighting even when the wiring is installed according to the national code.

Perhaps one of the most serious hazards in connection with elevators is the common flat box bearing. This is generally used on beams, posts and bridge trees supporting the shafting. All bearings should rest upon

metal stands when supported from below, and if by metal hangers or brackets on posts, these should have self-oiling devices with attached drip cups and a clear air space around them.

Hazard of additional machinery. — As to the additional machinery often introduced into elevators, the following are the most hazardous : separators of the old fanning mill type but on a much larger scale.

These machines are attended with considerable hazard on account of their high speed and the liability of foreign matter in the grain to cause sparks. Feed mills are of various types, those in general use being of the metal roll, buhr stone and plate chopper type. The hazard of the metal roll and buhr stone is somewhat greater than those of the same class found in flour mills, as they operate at a high speed. Plate choppers are a much more serious hazard than the rolls or stones, as being closely set, when over heated they have been known to throw out sparks themselves. Where none of these standard requirements exist the elevator schedule calls for an extra charge of ninety-six cents, which is equal to a reduction of that amount if the requirements are carried out. This would seem to be a generous allowance when all the factors of fire hazard are considered. Generally the danger of fire starting above the bin floor is as great as below and the water supply in the average town would scarcely have sufficient pressure for efficient protection in the cupola. An underwriter's pump is called for in the requirements for this special reason. As to standpipes, they are turned off in winter and, further, should the pump be at any time required for a fire in the cupola it is probable that before the pumps could be put into operation the fire would be beyond control. It is certain that the employees would not remain for water at the standpipe if the fire become at all dangerous. Casks and pails are of value in elevators, but very often they are found frozen in winter.

A reduction of thirty cents is given for a standard equipment of automatic sprinklers and this amount appears to be quite sufficient when the type of construction in frame elevators is considered. Terminal elevators of wood construction are becoming a thing of the past and hospital and line elevators are gradually being built as more fire-resisting.

FRANCE.

INSURANCE AGAINST HAIL IN 1915. — *L'Argus ;* Paris, 10 September 1916.

In spite of the difficulties of the present time *L'Argus* has resumed in the following table the statistics for insurance against hail in 1915.

Names of Companies in order of age	Number of the Insured	Insured Values	Premiums or Assessments in 1915	Claims met and Costs of Settlements	Commissions, general Expenses	Profits or Excesses of the Year	Reserve Funds at the end of 1915
Stock Companies.							
L'Abeille	61,183	268,569,612	4,898,629	−2,534,635	1,123,655	1,049,215	3,756,081
La Confiance	34,053	125,563,472	1,941,270	794,982	498,817	658,822	2,587,007
	95,236	394,133,084	6,839,899	3,329,617	1,622,472	1,708,037	6,373,088
Mutual Societies.							
La Cérès	8,874	45,739,600	383,156	221,127	—	—	1,836,667
Société de Tolouse	26,389	120,056,960	951,585	411,222	—	—	5,182,050
Seine-et-Marne	2,500	43,634,141	342,400	335,791	—	—	1,030,451
Aisne (1)	—	—	—	—	—	—	—
Etoile	8,437	76,474,600	720,131	447,993	—	—	3,061,952
Beauceronne Vexinoise	1,506	17,133,300	157,609	10,609	—	—	727,828
Seine-et-Oise	812	32,516,639	131,649	34,521	—	—	388,732
Garantie Agricole	546	15,702,800	72,780	23,073	—	—	970,229
Ruche (1)	—	—	—	—	—	—	—
Régionale du Nord (1)	—	—	—	—	—	—	—
La Grêle	6,186	16,731,485	231,180	87,812	—	—	2,465
Mutuelle Générale	7,478	22,969,778	291,904	108,209	—	—	—
Ferone	23,346	91,020,498	1,818,110	876,500	—	—	3,673,000
Rurale (2)	20,549	51,015,828	921,330	424,972	—	—	(2)
	106,623	532,995,629	6,021,834	2,981,829	—	—	16,873,374
Summary.							
Stock Companies	95,236	394,133,084	6,839,899	3,329,617	1,622,472	1,708,037	6,373,088
Mutual Societies	106,623	532,995,629	6,021,834	2,981,829	—	—	16,873,374
Totals	201,859	927,128,713	12,861,733	6,311,446	1,622,472	1,708,037	23,246,462

(1) In invaded country.

(2) *La Rurale* operates under the guarantee of the *Société de Garantie de la Rurale*, a joint stock company having a capital of 1,800,000 francs.

It will be noticed that this table is not complete. The figures are missing for the three mutual societies of *L'Aisne, La Ruche du Pas-de-Calais* and *La Régionale du Nord,* which have spheres of action mainly occupied by the German army. This fact should be borne in mind in making any comparisons with the results obtained in the previous year.

In spite of the very great difficulties which the societies have had to face in 1915, owing to the war and the mobilization of their staff of agents and other employees, they have given satisfaction to their habitual clients. If indeed allowance be made for the invasion of ten departments, the ge-

neral disturbance of civilization and the absence of the three societies, it will appear from the table that the results of 1915 can be resumed as follows :

Number of the insured	201,859	
Insured values	927,128,713	francs
Premiums and assessments.	12,861,733	"
Claims met	6,311,446	"
Reserve funds	23,246,462	"

The considerable amounts of their reserve funds show how restrainedly the societies have made profits from so contingent a branch of insurance as that concerned with hail. Out of twenty-eight years only four have brought them net loss - 1888, 1895, 1897 and 1908. The year 1916 will however be bad : the companies will register claims met to the amount of nearly 100 %.

SWITZERLAND.

THE SWISS SOCIETY OF AGRICULTURE (*Schweizerischer landwirtschaftlicher Verein*) AND INSURANCE AGAINST ACCIDENTS OF AGRICULTURE IN 1915. — *Jahresbericht des schweizerischen landwirtschaftlichen Vereins pro* 1915, Brugg, 1916.

The Swiss Society of Agriculture was founded, as is well known, in 1863, by a fusion of the Society of Swiss Agriculturists and the Central Swiss Society of Agriculture. It represents agricultural association throughout German Switzerland. It is concerned with matters generally interesting to agriculture and is commissioned to distribute the federal grants. It specializes in some branches of activity — provision for insurance against accidents, experimental organization of agriculture, importation of pigs and so forth. Its organ is the " Schweizerische landwirtschaftliche Zeitschrift ".

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The Swiss Society of Agriculture numbered, at the end of 1915, 29 sections and 60,967 members. On 31 December 1914 the Federation of Swiss Unions for Goat Breeding left it ; but on the other hand it was joined during 1915 by the Federation of the Unions of Zurich for Goat Breeding, which had 2,000 members. The number of

sections therefore remained unchanged, but the number of members has diminished by 1,299 since 1915.

The society's statement of accounts which has just appeared, shows that in its books 216,115.53 francs had been entered under the head of receipts at the end of 1915, of which sum 24,000 francs represent the federal subvention; and that in 1915 the funds accruing from insurance against accidents amounted to 97,830.78 francs. Under the head of expenditure 213,388.73 francs were entered, of which sum 97,699.79 is accounted for by insurance against accidents.

There was thus a credit balance of 2,776.81 francs. At the end of 1915 the endowment of the society amounted to 67,047.84 francs.

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As regards insurance against the accidents of agriculture it must be noted that another decrease has to be recorded for 1915. The reason for this is that many agriculturists being under arms, owing to the mobilization, and therefore in enjoyment of military insurance, thought they might give up agricultural insurance.

The following persons were insured in 1915:

4,273 men
92 women

Total 4,365 persons, of whom 1,026 were employers, 386 members of families (355 men and 27 women), and 2,957 servants and journeymen workmen (2,892 men and 65 women). In addition 464 farms were insured: that is a total number of 4,829 insurances as against 5,616 in the preceding year.

As regards the periods for which insurances were effected:

3,333 insurances were for 12 months
377 " " " 9 "
234 " " " 6 "
68 " " " 3 "
353 " " " 2 " and 1 month (journeymen workmen).

The 4,829 insurances are the result of 2,070 transactions, distributed among the cantons as follows:

Lucerne	744	transactions
Zurich	583	"
Argovia	157	"
St. Gall	123	"
Thurgovia	94	"
Zug	88	"
Soleure	42	"
Obwalden	39	"
Schwyz	38	"
Schaffouse	34	"
Grisons	34	"
Appenzell	30	"
Basle	25	"
Glaris	22	"
Berne	8	"
Nidwalden	6	"
Uri	3	"
Total	2,070	"

As stated in reporting on the books, 94,787.18 francs were paid in premiums and supplementary grants for doctors' and chemists' bills.

The number of claims met was 589, which, proportionately to the number of insurances, denotes a marked increase. The proportion is of one accident to every eight insured persons, and should be attributed to the fact that insufficiently skilled auxiliary labour was often employed on agriculture during the year. Among those whose claims were paid, are 196 employers, 40 members of families, and 353 employees, servants and journeymen workmen.

Of the 589 accidents three were fatal, 35 brought about partial disablement, and 551 temporary disablement.

It should be noted, in conclusion, that the Swiss Institute for Insurance against Accidents (Schweizerische Unfallversicherungsanstalt) will not be at work until 1917; and that hitherto none of the 17 cantons to which the Swiss Society of Agriculture extends its activities has made any decision as regards compulsory insurance against sickness.

Part III: Credit

ITALY.

THE AGRICULTURAL CREDIT OF THE SAVINGS' BANK OF THE "BANCO DI NAPOLI", AND THE INSTITUTIONS FOR AGRICULTURAL CREDIT IN LATIUM, LIGURIA AND BASILICATA IN 1915.

SOURCES :

BANCO DI NAPOLI. CASSA DI RISPARMIO. CREDITO AGRARIO. Relazione sull'esercizio 1915 (*Bank of Naples. Savings Bank. Agricultural Credit Report for* 1915).

CREDITO AGRARIO PER IL LAZIO. Relazione sull'esercizio 1915 (*Agricultural Credit in Latium. Report for* 1915) Rome. R. Garroni, 1916.

ISTITUTO DI CREDITO AGRARIO PER LA LIGURIA CON SEDE IN PORTOMAURIZIO. Rendiconto dell'esercizio 1915 (*Insitute of Agricultural Credit for Liguria, situated at Portomaurizio. Return for* 1915) Oneglia. Arti Grafiche Fratelli Berio, 1916.

LA CASSA PROVINCIALE DI CREDITO AGRARIO PER LA BASILICATA DURANTE IL 1915 (*The Provincial Fund for Agricultural Credit in Basilicata during* 1915), in « L'Agricoltore del Mezzogiorno », no. 7, Naples, 15 July 1916.

LAWS AND REGULATIONS relevant to the institutions cited above.

We have already described the activities of the agricultural credit department of the *Banco di Sicilia* in 1915 (1). We will now examine the action in the same year of the Savings Bank of the *Banco di Napoli* and that of the especial institutions for agricultural credit in Latium, Liguria and Basilicata.

(1) Issue of August 1916, p. 63.

§ 1. The Agricultural Credit of the Savings Bank of the "Banco di Napoli".

Intermediary Institutions. In 1915 the *Banco di Napoli* was obliged to suspend its active and direct propaganda, which in 1914 had been intensified with notable results. Nevertheless, as appears from the last report issued by this bank, the number of institutions to which the law (1) compels land credit to be extended has again increased. Thus while on 31 December 1914 there were 2,080 of them, their number on 31 December 1915 was 2,145. It is fair to note that of these only 1,197 were judged "good", that is fit to receive credit. The institutions may be classified as follows according to their nature :

Agricultural and rural banks	473
Monti frumentari e nummari of Sardinia	288
Popular banks	149
Agricultural unions	124
Banks for agricultural loans	120
Savings Banks	15
Mutual aid societies	9
Monti frumentari	8
Autonomous provincial banks for agricultural credit	6
Societies for agricultural credit	5
	1,197

Of these 1,197 institutions characterized as "good" 116, including 110 popular banks, receive credit at the *Banco di Napoli* even for ordinary discounts. Of the whole number 39.05 % are nominally collective societies and have collective and unlimited liability. This proves, to quote from the report, "that farmers are beginning to be convinced that small *local institutions* are most fitly and most practically collective in form, for the joint liability almost or quite takes the place of preference shares, and supplies an effective motive for reciprocal control which operates to ensure that the loans are of real service to agriculture". Associations of this kind have now spread over the eighteen provinces of the south and Sardinia. The most important province, Cagliari, has 130 of them ; and there follow Aquila with 59, Salerno with 45, Caserta with 42 and Sassari with 30.

At the end of 1915, 722 institutions were registered as open to give agricultural credit for 28,509,600 liras. Of them 288 agricultural and rural banks were open for 9,092,000 liras, 135 popular banks for 6,955,000 liras, and 90 agricultural unions for 8,187,500 liras.

(1) For a summary of the rules regulating agricultural credit in Italy see "Agrarian and Land Credit in Italy during the five years 1910-1914" in our issue for July, p. 79.

The greatest number of these unions belong to the province of Caserta which has 13 of them. There follow the provinces of Benevento with 11, Lecce with 10, Catanzaro with 9, Foggia with 8 and Bari with 7.

Agricultural and rural banks are most numerous in the province of Aquila which has 42 of them. Next come Caserta with 36, Cagliari with 34, Salerno with 33, Benevento with 18, and Teramo with 17.

Activity in 1915. — In this year the transactions of the Savings Bank of the *Banco di Napoli* covered 16,135,743 liras. Of this sum 3,960,215 liras is accounted for by transactions concluded with the bank's own funds, and 12,175,528 liras by those concluded with the funds of the provincial banks for agricultural credit. This sum shows an increase of 2,201,584 liras on that of 1914.

Altogether rediscounts amounted to 12,412,292 liras, direct loans to agriculturists to 452,178 liras, direct discounts to intermediary institutions to 3,271,273 liras. In spite of the difficulties of the money market the rate of interest remained unchanged last year : at 3.5 % for operations of direct rediscount and discount transactions with intermediary institutions ; and at 4 % for direct transactions with agriculturists. In granting loans the intermediary institutions charged interest at rates varying from 3 ½ % to 6 % but most frequently 5 % or 5 ½ %.

The rediscounts and direct loans can be classified as follows, according to their objects :

1) *Loans guaranteed by a legal preference :*

	Number	Amount in Liras
For harvest	924	621,654.95
» cultivation	8,530	3,174,837.38
» seeds	3,911	2,166,638.70
» manure	3,522	744,293.95
» anticryptogamous substances	2,571	355,004.69
» food for settlers	45	5,913.42
» » » agricultural labourers	85	14,655.51
» various objects	3,340	2,051,165.29
	22,928	9,134,163.89

2) *Loans not guaranteed by a preference :*

	Number	Amount in Liras
For large livestock	2,601	1,952,545.12
» small »	318	86,250.18
» machines	459	245,825.68
» agricultural implements	455	60,965.55
» other farm requisites	141	40,570.50
» various objects	106	40,307.69
	4,080	2,426,464.72

3) *Loans on security of deposits of agricultural products held as pledges:*

	Number	Amount in Liras
On cereals	170	1,272,736.95
» wine	4	17,760.00
» almonds	5	13,345,00
	179	1,303,841.95

Of these loans those guaranteed by a legal preference represent 70.98 % of the sum of the credit granted to agriculturists ; those not thus guaranteed 18.85 % ; and those on security of deposited agricultural products 10.17 %.

Of all the loans 14,755 for a total amount of 6,952,420.11 liras, that is 54.05 %, have been granted to landowners ; 10,788, for 5,627,031.99 liras, that is 43.75 %, to farmers ; 873 for 187,843.62 liras, that is 1.45 % to *métayers* or tenants bound to render a share of their produce to their landlords ; and 771, for 97,174.84 liras, to leaseholders (1).

Direct discounts have been given to intermediary institutions : 264 amounting to 2,114,738 liras for collective purchase of articles useful to agriculture, that is 64.64 % ; 15 representing 339,026 liras for the collective sale of agricultural products, that is 10.36 % ; and 287 amounting to 817,510 liras, that is 25 %, to supplement the insufficient means which intermediary institutions have at their disposal. Almost all these discounts have been proposed by the rural unions and rural banks.

The different provinces may be arranged as follows, in the order of the degree to which they availed themselves of the credit granted by the *Banco di Napoli* in 1915 :

(1) As regards the individual amounts of credits it is enough to state that 9,254 out of 27,187 loans were of less than 100 liras, 12,006 varied from 100 to 500 liras in amount, and 4,107 from 500 to 1000 liras. That is to say that 93 % of the total number of the loans and 55 % of their total amount were for operations covering a sum less than 1000 liras.

Credit granted to the Provinces in 1915.

Provinces	Amount in Liras
Foggia	4,715,420.31
Bari	2,328,199.69
Salerno	1,258,725.01
Caserta	1,249,036.89
Teramo	1,012,083.39
Aquila	991,451.50
Lecce	818,099.78
Reggio	621,233.00
Campobasso	526,137.04
Benevento	502,584.62
Sassari	462,387.09
Catanzaro	319,089.30
Cagliari	261,052.50
Potenza	260,962.45
Avellino	245,936.76
Cosenza	195,995.68
Naples	195,880.25
Chieti	171,468.30
	16,135,743.56

In the fourteen years for which it has been at work the agricultural credit department of the Savings Bank of the *Banco di Napoli* has distributed the respectable sum of 90,870,000 liras to the agriculturists of the southern and Sardinian provinces.

Of this sum only 2,468,437 liras in loans has been granted *directly* to agriculturists. The rest, amounting to 88,402,501 liras, has been distributed as provided by the law, by the medium of the local associations as follows: 50,114,173 liras by the agricultural unions; 22,277,757 liras by the agricultural and rural banks; 11,693,182 liras by the popular banks; 1,789,752 liras by the autonomous provincial banks for agricultural credit; 609,598 liras by the savings banks; 473,540 liras by the mutual aid societies; 316,935 liras by the banks for agricultural loans; and 62,905 liras by the *Monti Frumentari* of Sardinia.

The agricultural unions hold, as always, the first place among institutions dispensing credit. They have done so to the amount of more than 50 million liras, that is 56.80 % of the total sum covered by all these credit operations. Next in order come the agricultural rural banks, responsible for more than 22 millions or 25.20 % of the total sum.

The general movements of credit can be classified for the period examined, according to the nature of the operations, as follows: for rediscounts to intermediary institutions 69,716,626 liras; for direct loans to agricultu-

rists 2,468,447 liras; for direct discounts to intermediary institutions 18,685,687 liras.

§ 2. The "credito agrario per il lazio".

This institution was founded at Rome by the law of 21 December 1902, N° 542, with an initial capital of one million liras. The *Banco d'Italia* contributed to the foundation 500,000 liras, the Savings Bank of Rome 200,000 liras, and the Savings Bank of the Lombard Provinces 300,000 liras (1). In order to increase its resources the *Credito Agrario per il Lazio* may receive savings deposits and issue dated bonds.

It functions only in the province of Rome and operates both by the medium of intermediary institutions and directly with agriculturists.

In reference to the former class of operations it must be noted that the intermediary institutions with which the rules of the *Credito* allow business to be done are the following: the agricultural unions, the agricultural committees which exercise the functions of unions, the agricultural and rural banks, the banks for agricultural loans, the agricultural universities, the collective distilleries and cellars, the agricultural associations for the collective sale of agricultural products, the popular banks, the savings banks and the various agricultural credit societies.

Transactions with these institutions comprise:

1) the rediscount of bills issued by agriculturists and payable at institutions of the types cited, if these have been legally constituted, have their offices in Rome, and, preferably, are co-operative in form;

2) the acceptance for discount of bills directly issued by these intermediary institutions, in order either to procure for them means for the purchase on order of articles useful to agriculture, or to enable them to make advances in cases of the collective sale of agricultural produce;

3) the acceptance of bills directly issued by the intermediary institutions and representing the bills which the institution has in hand and is authorized to discount;

4) the opening of current accounts for the intermediary institutions, in place of the rediscount of the bills they have in hand.

The transactions with agriculturists directly comprise:

1) the acceptance for discount of bills issued by agriculturists living in neighbourhoods which have no intermediary institutions or in which the intermediary institutions cannot undertake business of this nature;

2) the acceptance for discount of bills issued by agriculturists, guaranteed by a preference conferred on demand;

(1) Of the three establishments cited only the *Banco d'Italia* has a share in the profits of the *Credito agrario per il Lazio*, and that in right of its contribution of 500,000 liras. The two savings banks paid their contributions into the sinking fund.

3) the acceptance for discount of bills issued by agriculturists, guaranteed by pledged agricultural products.

The maximum total amount of each loan to a single grantee must not exceed 5,000 liras, except in the case of operations guaranteed by a preference, for which the maximum limit is fixed at 10,000 liras.

Finally as regards transactions on the security of pledged agricultural products, their amount is fixed as follows : on cereals and wools 75 % of the value of the pledges; on oil 60 %; on straw, hay, wine, vinegar, brandies etc. 40 %.

The term of the credit operations cannot exceed one year; except in the case of loans for the purchase of live stock and machines which may be for three years.

The rate of interest which the *Credito agrario per il Lazio* is authorized to demand on loans must not exceed by more than 1 % the minimum rate paid by the institutions issuing to it The intermediary establishments can in their turn retain at the most 2 % of the minimum rate of interest granted by the institutions issuing to the *Credito agrario per il Lazio.*

The latter superintends the intermediary establishments by means of inspections, and is bound to inform the Ministry of Agriculture of all violations of statutes and rules of which they may have been guilty (1).

We will now resume the chief results of its action in 1915.

Altogether the operations of 1915 covered 10,487,372.59 liras. For the most part these transactions were with intermediary institutions, namely to the extent of 9,102,836.54 liras, shared as follows :

Agricultural unions and committees	4,751,129.99	liras
Various societies operating in agricultural credit	2,116,037.54	»
Collective distilleries and cellars	703,000.00	»
Popular co-operative banks.	656,687.22	»
Rural banks	448,449.95	»
Societies for trade in and sale and export of agricultural products.	233,248.77	»
Savings banks.	107,835.37	»
Agricultural loan banks	86,447.70	»
	9,102,836.54	liras

(1) The *Credito agrario per il Lazio* is administered by a council of nine members, of whom five are nominated by the *Banco d'Italia*, two by the Savings Bank of Milan and two by the Savings Bank of Rome. The two latter establishments have delegated the right to nominate their representatives to the Chamber of Commerce of Rome and the Deputation of the Province of Rome, respectively. The president is nominated by royal decree and remains in office for three years; he may then be confirmed in his office. The councillors are in office for two years and may also have their term continued. The members of the council of administration constitute, in turn, a special commission, responsible for examining the proposed operations of the *Credito Agrario per il Lazio* and deciding for or against them. Such commission is formed of two members and the director of the *Credito Agrario per il Lazio* who has a casting vote. The council is obliged annually to present a statement of its administration to the Minister of Agriculture who is competent to approve it. This minister superintends the *Credito agrario per il Lazio* by means of inspections made in accordance with the law.

The destinatin of these loans was as follows :

Cultivation of cereals	2,832,545.65	liras
» » vines	1,911,091.32	»
Sulphate of copper, sulphur, various manures	1,460,109.98	»
Various cultures	1,405,445.58	»
Raising live stock	678,333.75	»
Cultivation of olives	474,474.60	»
Agricultural implements and machines	340,895.66	»
	9,102,836.54	liras

The loans were distributed according to their amounts as follows :

Number						Amount in Liras
2,231	from	1	to	50	liras	628,851.28
6,370	»	51	»	100	»	620,132.17
5,484	»	101	»	500	»	1,459,169.40
2,044	»	501	»	1,000	»	1,632,692.63
1,670	»	1,001	»	5,000	»	2,389,749.47
1,461	above		»	5,000	»	2,372,241.59
19,260						9,102,836.54

Operations made directly with agriculturists covered 1,384,536.05 liras. The accounts were closed with a profit of 24,032.71 liras. The rate of interest on operations with intermediary institutions oscillated from 6 to 6 ½ %, and on those with agriculturists from 7 to 7 ½ %.

§ 3 The " Istituto di credito agrario per la Liguria ".

Formed by the law of 6 July 1912, No. 802, and endowed with an initial capital of 500,000 liras, this institution was authorized to effect the following credit operations : *a*) discount of bills delivered by intermediary institutions and issued by agriculturists, with a view to agriculture, for the harvest, seeds and manures, and in order to procure live stock for farms and pay for the hiring of agricultural implements and machines ; *b*) the opening of current accounts with intermediary institutions, or the discount of bills issued directly by these institutions, in order to procure means to make purchases in fulfilment of orders for articles useful to agriculture, or in order to advance money to persons applying for it in case of collective sale of their products, or in case of collective purchases of machines and implements to be hired by members of a society (1).

(1) By the decree of the General Lieutenancy of the kingdom, dated 17 June 1915, No. 961, the *Istituto di credito agrario per la Liguria* was also authorized for certain direct credit operations providing for agricultural improvements.

The operations of the *Istituto di credito agrario per la Liguria* extend into the provinces of Portomaurizio and Genoa. It began its activities on 6 August 1914.

Its transactions with intermediary institutions in 1915 were distributed as follows: advances (direct discounts, current accounts) 259,499 liras; rediscount of agricultural bills, 622 in number, for 139,742 liras.

The advances may be classified, in relation to their objects, as follows:

Collective purchases:

Manures	78,772	liras
Anti-cryptogamous substances	113,413	»
Seeds	8,884	»
Farm requisites	1,000	»
Various objects	7,769	»
Collective sale of agricultural products	37,166	»
Agricultural industries	8,494	»
Loans made	4,000	»

The rediscounts were distributed, according to their objects, as follows:

	Number	Amount in Liras
for manures and dressings	363	85,632
» live stock	86	28,796
» various objects	82	10,046
» cultivation	40	8,340
» anti-cryptogamous substances	33	3,921
» the harvest	3	1,000
» farm requisites	1	840
on deposits of agricultural produce	2	805
for machines and various implements	7	271
» seeds	5	92

From these figures it appears that if the operations of agricultural unions — collective purchases and credit in kind — predominate, the operations of credit to cover the costs of farming are on the other hand unimportant. This is a reason why this institution has asked and obtained from the Minister of Agriculture an authorization to extend its action into a new sphere, that of direct loans for agricultural improvements, and works connected with the transformation of cultures and with irrigation, which were greatly needed in the district (1). The number of such requests for loans is indeed constantly on the increase and has now reached 80, while they cover a sum of 119,520 liras. In 1915, 37 loans of this kind were made, for 37,640 liras.

In conclusion we must note that the administrative council of this institution has recently expressed to the Minister of Agriculture a desire

(1) Cf. preceding note.

to be authorized to make advances : *a*) to agriculturists who themselves handle and work up the products of the soil, to procure them suitable plant for agricultural industries; *b*) to co-operative societies in Liguria, for the setting-up and rebuilding of co-operative oil-mills, collective cellars and co-operative dairies, and of the plant of industries producing and handling articles useful to agriculture.

§4. The " cassa provinciale di credito agrario per la basilicata ".

As has been said the law of 7 July 1901,No.334, authorized the Savings Bank of the *Banco di Napoli* to operate in agricultural credit in all the provinces of the southern mainland, and therefore in the province of Potenza. But in the case of the latter it was felt that especial measures were necessary ; and hence originated the law of 31 March 1904, No. 140, which instituted the Provincial Bank of Agricultural Credit for Basilicata which has its offices at Potenza.

For its endowment there were set aside a sum of two million liras advanced by the State (1) ; and all available territory belonging to the State patrimony and situated in Basilicata, the non-wooded territory of the patrimony of the province, and all lands which, by means of the hydraulic works constructed along the water-courses, should be reclaimed from the unproductive section of river-beds.

The operations for which this provincial bank was authorized, by the cited law and that of 9 July 1908 with its amendments, are not confined to those of agricultural credit for cultivation as in the case of the Savings Bank of the *Banco di Napoli*. They comprise dealings in agricultural credit both for cultivation and for improvement. Their objects are actually: *a*) to grant advances in cash, in implements or in live stock to the *monti frumentari*, agricultural banks and agricultural unions which, thanks to the means with which they are provided, make loans to agriculturists; *b*) to make advances to leaseholders and recognized agricultural co-operative societies who have undertaken agricultural or kindred industries with one of the following objects — 1) making dwellings for settlers, fit stables, paths conducive to agriculture, or works for supplying farms with water for drinking and irrigation, or enclosing open lands with walls and hedges; 2) tree planting and works of re-afforestation; 3) purchase of live stock; 4) purchase of implements of labour, primary and general materials and live stock; *c*) to make advances to owners and cultivators of land for objects 1, 2 and 3.

The following are some facts as to the activities of the bank in 1915.

At the close of the year its books showed 5,728,177.65 liras on the receipts and 5,637,062.89 liras on the debit side, giving a net profit of 91,114.76 liras.

(1) The State advance is granted without interest for 10 years. From the eleventh year it bears interest at the rate of 2 % for 50 years, after which repayment is due.

The credit granted indirectly to agriculture by the medium of the *monti frumentari*, and the agricultural banks and unions, for seeds, manures, anti-cryptogamous substances, live stock and farm requisites, put into circulation 2,755 bills for 1,080,855.91 liras, that is an average of 392 liras a bill, as against 2,815 bills for 1,061,235 liras in 1914. The balance on 31 December 1915 was 548,382.30 liras, distributed as follows : *monti frumentari* 20,000 liras ; agricultural banks dependent on public institutions, 183,449.55 liras, agricultural banks constituted as trading societies, 196,522.35 liras ; agricultural unions, 148,410.40 liras.

The credit granted directly to agriculture, that is directly to individuals, and authorized by the decree of 11 October 1914, had a notable importance in that year. The applications numbered 483 and were for 963,543 liras : 247, for 948,806 liras, were granted in their entirety ; and 95 for 187,175 liras, partially ; while 95 for 174,174 liras were wholly rejected. Loans amounting to 517,657 liras are represented by 484 bills. Of these 234 are for sums less than 1,000 liras — 56 of them being for sums up to 100 liras, 57 for sums up to 200 liras, 47 for sums up to 300 liras and 40 for sums up to 400 liras. The applications now being examined number 60 and are for 107,574 liras.

Loans for the purchase of live stock decreased in 1915. Those granted in the form of current accounts amounted on 31 December 1914 to 28,354.70 liras. Their present figure is 23,285.95 liras. Almost all of them are guaranteed by mortgages. As for loans made in the form of bills, which at the end of 1914 numbered 401 and amounted to 692,303.85 liras, their number has fallen to 375 most of which have been made on personal guarantee. The applications considered in 1915 numbered 109 and were for 288,500 liras. Thirty-eight for 128,400 liras were rejected, 33 of them partially only. Eleven, totalling 69,900 liras, are under consideration.

Credit operations to enable improvements constitute an important category. The balance at the end of the year, which had been 594,943 liras, had risen to 621,256.30 liras.

Ninety-nine loans of this category were made for a total sum of 733,632.70 liras. Of this sum 28,750 liras was lent for the construction of aqueducts, 106,060 liras for that of stables, and 277,222.70 for that of dwellings for settlers.

The loans secured by mortgages were for the most part — that is to the amount of 348,660 liras — for a term of 20 years ; a certain number, totalling 186,084.50 liras, were for a term of 35 years, now an average term ; and the rest for a term of from five to 50 years.

The applications considered numbered 27 and were for 170,500 liras, and four of them, for 49,500 liras, were rejected. Twenty-five, for 167,987 liras, are under consideration.

The loans for tree planting reached a total of 9,332 liras.

If we leave on one side operations of a special character we conclude finally that the capital, properly speaking, of this bank — special and reserve funds being left out of account — reached a total of 1,874,202 liras at the end of the year.

Part IV: Agricultural Economy in General

AUSTRIA AND HUNGARY.

THE AGRARIAN QUESTION IN BOSNIA AND HERZEGOVINA.

OFFICIAL SOURCES:

DIE ERGEBNISSE DER VOLKSZÄHLUNG IN BOSNIEN UND DER HERZEGOWINA VOM 1910. (*The results of the* 1910 *Census in Bosnia and Herzegovina*). Sarajevo, 1911.

BERICHTE ÜBER DIE VERWALTUNG BOSNIENS UND DER HERZEGOWINA 1906-1910. (*Reports on the administration of Bosnia and Herzegovina, for* 1906-1910). Vienna.

OTHER SOURCES:

GRÜNBERG (K.): Die Agrarverfassung und das Grundentlastungsproblem in Bosnien und der Herzegowina (*The agrarian settlement and the problem of land redemption in Bosnia and Herzegovina*). Vienna, 1911.

SPAHO (M.): Die Agrarfrage in Bosnien und der Herzegowina. (*The agrarin question in Bosnia and Herzegovina*. Vienna, 1912.

SCHMIDT (Dr. F.): Bosnien und Herzegowina unter der Verwaltung Oesterreich-Ungarns. (*Bosnia and Herzegovina under the Austro-Hungarian administration*). Leipzig, 1914.

§ 1. THE AGRARIAN QUESTION IN BOSNIA AND HERZEGOVINA AT THE TIME OF THE AUSTRO-HUNGARIAN OCCUPATION.

When the Austro-Hungarian government occupied Bosnia and Herzegovina it found the feudal system still in existence in the country districts, as in the time of the ancient Serbian State, with modifications introduced during the Turkish dominion.

On taking possession of Bosnia and Herzegovina Turkey left the existing agrarian organization untouched except for a few modifications made to bring it into harmony with the new political régime and with the precepts of the Coran.

Among the alterations introduced by the Turks in these territories must be mentioned those affecting the landowning classes in their relations to the government, and those affecting the mutual relations between owners and tillers of the soil.

The former are the more important, and in order to understand them they must be gone into at some length.

The Turkish government expropriated the Serbian feudal landlords (*bascitinari* and *proniari*) and the Serbian churches and convents, and their lands were distributed to Turkish feudatories (*Aga* and *Spahi*) and to the mosques ; the only Serbian landlords who were not expropriated were those who accepted Islam.

The feudatories of the ancient Serbian state were the *bascitinari*, or landlords, and the *proniari*, or usufructuaries of land belonging to the State. This organization was altered by the Turkish government which, when distributing the land to Mohammedan feudatories, only conferred on them the usufruct thereof, whilst reserving ownership to the State. This régime is prescribed by the Coran which holds that land is vested in God and in the Sultan as his representative. Private individuals may only own a house with a garden of half a *dunum* in area, equivalent to about 4 to 5 hundred square metres. Private landed property is termed *mulk*, and that of the mosques, religious congregations, and charitable foundations is known as *vakuf* ; the respective usufructuaries are known as *mirije* and *vakuf not in their own right*.

The difference between ownership (*mulk* and *vakuf*) and usufruct (*mirije*), which was clearly defined in the first centuries of Turkish dominion, gradually decreased. In Bosnia and Herzegovina, which were frontier provinces, the authority of the government was always weak, and with the disintegration of the Turkish State which began in the early years of the nineteenth century, the feudatories of these provinces, denying the right of ownership vested in the State, usurped the power of owners of the lands granted to them in usufruct. This led to an interesting situation : from a legal standpoint the Bosnian and Herzegovinian feudatories had to be considered as usufructories of the lands they held ; but in practice they considered themselves landowners and the Turkish government treated them as such.

In order to understand properly the terms *owner* and *property* used in this article this state of things must be borne in mind. These terms will always have the legal significance of usufructory and usufruct, excluding the conception of property pure and simple.

As to the modifications introduced in the relations between feudatories and tillers of the soil during the first centuries of Turkish rule they remained the same as those which prevailed in the ancient Serbian State and were regulated by local usage. But in the beginning of the nineteenth century the feudatories tried to increase the burden of feudal taxes and services. Their efforts caused the peasantry to rebel, and this led the Turkish government to enact especial laws regulating these relations. For this purpose the Acts of 7 *ramasan*, 1274 (1857) and 14 *safer*, 1276 (12 September 1859) and of 7 *mukarem* (9 February 1876) were passed. The principles laid

down in these laws, more especially in that of 14 *safer*, 1276, still regulate these relations to a great extent.

As has already been said, the agrarian system prevailing in Bosnia and Herzegovina at the time of the Austro-Hungarian occupation was that which existed in the ancient Serbian State, as modified during the Turkish dominion, and was as follows:

(1) Legally speaking all, or almost all the lands were the property of the State which administred them in the following manners:

(*a*) by direct cultivation (State property in the strict sense of the term) as for instance woods and model farms;

(*b*) by granting the use of them to all subjects or to the inhabitants of the several communes: the so-called *metruke* lands. This category comprised also the so-called *mevat* or barren lands;

(*c*) by granting them in usufruct to private persons, corporations, mosques, religious corporations or charitable foundations: the so-called *mirije* and *vakuf not in the tenant's own right.*

(2) A very small portion of the land was, as already stated, private property.

(3) There was no longer any real difference between private landed property (*mulk* and *vakuf*) and State property granted in usufruct (*mirije* and *vakuf not in the tenant's own right*): in practice both were treated as private property.

(4) Private landed property as above set forth belonged almost exclusively to Turks, i. e. to Mohammedans, and existed in two forms:

(*a*) as small or average sized holdings belonging to so-called free peasants who tilled their own lands;

(*b*) as large landed estates belonging to feudatories (*Aga* and *Spahi*) and to a small extent to mosques, religious congregations and charitable foundations. The feudatories themselves only farmed a small section of their lands (*beglic*); the greater portion was let (*ciflic*). Such leaseholds preserved almost all the characteristics of the feudal régime; the renters (*kmeti*) were almost exclusively Serbian.

(5) The relations between landowners and renters were regulated as follows:

(*a*) The lease was almost always for a long term of years; or rather, as far as the renter was concerned, was perpetual, as the landowner, except in special cases, could not rescind it. A landowner could only terminate a lease if the renter either failed to cultivate the soil which he rented or failed to meet his legal obligations. The renter who tilled the soil and fulfilled his obligations had the right to remain on the land for ever, and on his death this right passed to his heirs.

On the other hand, the renter was entitled to terminate the lease at any time, and in such event the landowner was required to compensate him for all improvements.

On farm lands thus let the owner was required to build a dwelling house and the requisite farm buildings.

(*b*) Although the lease was perpetual the landowner had the right to

make over his lands to his heirs or to any other person, but all such changes left the rights of the renter intact, and his relations with the new landowner underwent no change.

If the lands changed hands through inheritance the heirs could not divide those held under one lease (*kmetluk*), that is to say the lands granted on lease were perpetually indivisible.

If the landowner wished to sell his lands, the renter, other things being equal, had the right of first refusal.

(*c*) The terms of the lease were arranged with the head of the tenant family, and in its name. The renter's heirs could not divide lands thus rented between themselves without the landowner's consent.

(*d*) In lieu of rent the *kmet* made over to the landowner part of the gross products of the farm, known as *hak*. Usually this *hak* amounted to one third of the gross returns, but in some cases this contribution was larger or smaller ($\frac{1}{2}$ to $\frac{1}{5}$). A higher percentage was, as a rule, only paid in exceptional cases, as when the landowner supplied the tenant with seed, farm implements, and draught cattle.

Fixed rents in kind, in which the amount due to the landowner was agreed on in advance, regardless of the net production, were extremely rare.

The renter only paid *hak* on the staple crops, all other secondary crops (vegetables and fruits) and any live stock he might raise were his own; but to avoid abuses, the conditions regulating these by-products were laid down in the lease.

The renter could not begin his harvest until he had informed the landowner, who sent an agent of his (*subasia*) to superintend the division.

The renter was required to deliver the *hak* at the landowner's residence or at any other place indicated. He received no payment for its carriage; only if the landowner's share were larger than usual or if the place of delivery were too distant, did he receive some small compensation.

(*e*) Besides the *hak*, the renter was required to perform the so-called feudal services. In remote times these were many and tiresome; one or two days' work a week on the *beglic* lands. The law of 1859 restricted these services to a few days' work a year, and that only on farms paying a small *hak* ($\frac{1}{4}$th to $\frac{1}{5}$th.).

(*f*) The laws above mentioned fixed the principle regulating the relations between landowner and renter but the details set forth in the lease were arranged by mutual agreement. The contract was either written or oral. Contracts containing clauses other than those provided for by law were only valid if favourable to the renter; if disadvantageous to him they were held null and void.

(*g*) All disputes between landowner and tenant were settled by the *Cadi* or *Kaimakan*, that is to say by an ordinary or by an administrative judge. The choice of the judge was left to the parties to the dispute.

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Under Turkish rule no statistical data on agrarian administration were collected. The first collection of such data was made in 1885, that is to say seven years after the Austro-Hungarian occupation.

In that year the agricultural population of Bosnia and Herzegovina was distributed as follows :

8,162 large landowners ;
117,466 small and medium sized owners ;
197,833 *kmeti* (renters).

These first statistical data do not lend themselves to examination as each of the three categories into which they are divided includes diverse elements. For instance, the category of large landowners includes both owners who farm their lands themselves and those who let them ; the category of renters includes both small landowners who farm lands which they rent as well as those belonging to them, and renters who own no lands of their own. Only in the most recent statistics do we find a more accurate classification.

§ 2. The first period of the Austro-Hungarian occupation (1879-1911).

At the beginning of the Austro-Hungarian occupation the statesmen of the double monarchy were in favour of the abolition of the feudal régime in Bosnia and Herzegovina. As a step in this direction compulsory redemption was proposed, by means of which the renters (*kmeti*) would become owners of the lands they farm, the actual landowners receiving money compensation. The most resolute supporter of the abolition of the feudal régime was Count Andrassy.

The terms on which this compulsory redemption was to be effected were fairly advantageous in the early days of the occupation ; but the popular risings which occurred before the Congress of Berlin had so undermined all idea of law in these countries that confiscation would have seemed equitable. On the other hand, it must be remembered that the value of landed property was then very low so that compulsory purchase did not call for great financial sacrifices.

The first steps taken in this direction by the Austro-Hungarian government were such as to justify the hope that compulsory purchase would be carried out in the shortest time possible. A commission was appointed to collect all requisite information on the agrarian question (number of renters, value and area of the leaseholds, etc.). These statistical returns were to have formed the basis of the work to be done. At the same time all the administrative authorities were instructed to persuade the landowners to sell their lands to their tenants by mutual agreement, and this as a temporary measure pending the enactment of compulsory purchase.

But immediately after the appointement of Kalaj to the post of governor of Bosnia and Herzegovina the agrarian policy changed. The fundamental principle behind his policy was that of re-establishing and maintaining peace and order in Bosnia and Herzegovina. To succeed in this Kalaj avoided all measures, however useful or even essential, which might provoke disorders or even mere discontent in a single class of the population. The agrarian question which concerned the material interests of two important classes, the great landowners and the renters, appeared to him a problem which could not be solved without a conflict between their divergent interests. And as a conflict might have given rise to disorders or at least caused discontent to one or other of the parties concerned, Kalaj took care to leave the agrarian question alone.

It was therefore easy to foresee what would be the policy followed by Kalaj during his term of government. The idea of compulsory purchase was abandoned and replaced by that of optional purchase as the result of an agreement between both parties to the contract. Thus a measure which was to have been merely temporary, became a normal and permanent condition.

Nor was this all. Kalaj also gave up the idea of taking any steps which might lead to substantial changes in the mutual relations between landowners and renters. The law of 1859 remained in force almost as it stood, the modifications introduced being purely formal. For instance : (1) all leases must be registered in the land-registration books ; (2) the government land tax must be the basis for deciding the percentage of produce due to the landowner ; (3) all disputes between landowners and renters were to be settled by the administrative authorities.

Of all the measures taken by Kalaj the only one likely to lead to substantial changes, was the organization of agricultural credit banks ; but the steps taken in this direction were too defective to yield important results.

In the beginning those renters who had come to an agreement with their landowners for the purchase of their farms were granted loans from State banks or from the pension fund for government employees, and the government induced the Union Bank and the Mortgage Credit Bank for Bosnia and Herzegovina (*bosnisch-herzegovinische Hypothekarkreditanstalt*) which in 1885 became the National Bank of Bosnia and Herzegovina (*Landesbank für Bosnien und Herzegowina*) to grant agrarian loans.

As far as we know the loans were made on the following terms :

(1) Mutual loans were granted by the banks up to 50 per cent of the appraised value of the land so that the purchaser (renter) was compelled to procure the remaining 50 per cent by selling his live stock, applying to usurers, and so forth.

(2) Mutual loans were granted for long terms (10 to 20 years) the lender reserving the right to recall the loan at any time, and to foreclose the mortgage, if necessary, for the slightest negligence on the part of the borrower in fulfilling his obligations.

During the first period of 32 years, from 1879 to 1910, the enfranchisement of lands from feudal services only took place in the case of 28,481

renters, to whom the aforementioned banks granted loans amounting to 23,129,975 crowns.

It is thus evident that the number of farms enfranchised was not considerable, and the result is seen to be still more meagre if we examine the material conditions of redemption. The statistics and official reports do not speak of this, but information can be secured from private sources. We will only quote two :

(*a*) A large number of the enfranchised renters, about half, did not improve their condition. They had, it is true, become landowners but they no longer had the live stock nor the capital necessary for cultivating their farms, and they were, moreover, burdened with debt.

(*b*) A percentage of the enfranchised renters, about one fourth to one third, being unable to meet their obligations, were deprived of the farms they had purchased which were sold at auction, and instead of becoming landowners they were reduced to the status of agricultural labourers.

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The official report for 1906 describes the results of Kalaj's agrarian policy from 1879 to 1904, which was judged favourably by the public. We quote here these results :

(1) The material conditions of the renters had not improved. The mutual relations (rights and duties) of renters and landowners had not altered. The law of 1859, which regulated them under Turkish rule had continued to do so but for some slight amendments during the period from 1879 to 1904.

(2) Similarly the social relations between these two classes had not been modified and remained hostile. Evidence of this was supplied by the large number of lawsuits (200,543 from 1880 to 1904, i. e. 8,021 per annum) most of which had arisen from the fact that the renters had not fulfilled their obligations as laid down by the authorities.

(3) The redemptions effected from 1879 to 1910 were unsatisfactory in their results from all points of view. In 32 years the annual average number was 890.

We do not know the number of purchases made under Turkish rule as no statistics were then kept. The supporters of Kalaj assert that the agricultural credit banks, which did not formerly exist, have favoured a policy of land redemption. His adversaries assert the contrary, arguing that land owners in need of money instead of selling their lands as they used to do, have since 1879 been able to secure loans from the said banks.

The economic conditions of those tenants (50 %) who have become enfranchised have not improved as compared to those of the unenfranchised.

3. The act of July 13th, 1911.

Kalaj was succeeded by Burian, who approved of his policy but devoted greater attention to the agrarian problem.

The too rapid abolition of the feudal régime by means of compulsory purchase seemed to him inopportune for several reasons :

(*a*) because he feared that owing to the more developed legal consciousness of the people, consequent on the Austro-Hungarian occupation, expropriation would give rise to discontent and disorder among the Mohammedan population ;

(*b*) because he believed that the conversion of rent in kind into rent in cash would mean economic ruin for the expropriated landowners ;

(*c*) lastly, because he considered that compulsory purchase implied excessive financial sacrifices.

These reasons, and others perhaps which we do not know, induced him to stand by the system of optional purchase, which he tried to render more effective by improving the agricultural credit system.

In the first place he came to an agreement in 1909 with the Commercial Bank of Budapest (*Budapester Kommerzialbank*) which secured to this latter the monopoly of agricultural credit in Bosnia and Herzegovina, where it undertook to open a branch bank.

This agreement was very advantageous to this bank. According to accurate enquiries made by Prof. Grünberg it granted loans at from 8 to 10 per cent without incurring any risk whatsoever ; for all loans were guaranteed by mortgages, and also had a 10 years' guarantee from the State. Moreover all government authorities were placed at the service of the bank both for recovering interest and annuities and for foreclosing and selling at auction the real and personal estate of defaulting debtors. This agreement was not favourably received and was ultimately rescinded. Later on, in 1910, on the first assembling of the Bosnian parliament, a Bill was introduced on the agrarian question, of which we will give the principal provisions :

(1) The voluntary enfranchisement of renters as the result of agreement between the parties concerned.

(2) All the money required for carrying out such enfranchisement to be lent to the tenant by the government banks. This avoids the error of lending the renter only half the amount required. In its turn the government is to secure the requisite funds by issuing bonds to the bearer, maturing in from 30 to 50 years.

(3) Loans granted to renters to be for long terms (30 to 50 years) at an interest rate of 4 ½ per cent, repayable in half-yearly instalments. The amount of the loan to be paid in cash, except in cases when the landlord who is selling the farm prefers to receive payment, wholly or in part, in government bonds.

The government banks to make loans both for new redemptions and for the conversion of debts resulting from former redemptions.

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This Bill led to an animated debate in the Bosnian parliament.

The Serbian deputies were opposed to the fundamental idea of the proposal because it was based on optional redemption which in 32 years had failed to secure satisfactory results. They therefore introduced an opposition Bill, based on compulsory redemption.

The Mohammedan deputies, who at first favoured the government proposal, wished to paralyse the action of the Serbian deputies, and so introduced an opposition measure, which in substance was but a paraphrase of the Turkish law of 1859.

As neither of the two parties had a parliamentary majority the fate of the government Bill long remained uncertain, depending on the attitude of the Croatian party, in spite of the fact that they were the least numerous.

At the beginning of 1911 the situation improved. The Serbian deputies, fearing that parliament would be dissolved, renounced for the time being their demand for compulsory redemption and accepted the government Bill. They expressed, however, in a written declaration, the wish that the government should, as soon as possible, take the requisite steps to transform optional into compulsory redemption.

The gravest difficulty in the way of the Bill was thus removed, and it was approved by parliament on April 1st, 1911. After receiving the royal sanction on June 13th, the law became effective on December 1st of the same year ; but it was only in 1912 that the first loans were granted.

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The law is of too recent date to permit of an opinion as to its efficacy, and more especially to answer the enquiry whether land redemption will in the future proceed more rapidly than in the past.

According to statistical data gathered by private students, 11,258 loans had been made from the begnning of 1912 up to October 1913, two thirds of which were for new transactions and one third for the conversion of redemption debts previously incurred.

Taking as a basis the loans granted up to May 10th, 1912 — 2,360 for new redemptions and 750 for conversions as above — Mehmed Spaho comes to the conclusion that thanks to the new law redemption will proceed more rapidly than in the past. On the other hand, Grünberg and Schmidt are less optimistic ; they assert that it is not justifiable to assume that the number of purchases effected in the first year can offer a standard for judging the future, first, because the number of landowners inclined to sell their lands decreases both absolutely and relatively, and then because in view of the constant increase in land values the conditions of purchase grow more difficult from day to day. They conclude that the results secured will not be better in the future than they have been in the past.

Conclusion.

The official statistics for Bosnia and Herzegovina divide the agricultural population into the following classes :

(1) Large landowners whose estates are cultivated by tenants, *kmeti*;

(2) Large landowners who cultivate their own estates ;

(3) Free peasants, i. e. small holders ;

(4) Renters or *kmeti* ;

(5) Half-*kmeti*, that is to say very small holders who besides farming their own land rent other land from large estate holders. This class subdivides into two categories (*a*) landowning *kmeti*, if their principal business is the farming of their own lands, while the rented lands represent a subsidiary undertaking ; (*b*) *kmeti* landowners if the contrary holds good.

(6) Agricultural labourers.

For each of these categories the following table gives data as to the number of farms and the nature of the persons classified under it, with the respective percentage figures.

Agricultural Classes	No. of farms	%	No. of individuals	%
1. Large landowners who let their lands on lease	10,463	3.69	40,460	2.92
2. Large landowners who cultivate their own lands	4,281	1.31	16,182	1.17
3. Free peasants	136,854	48.33	634,789	45.82
4. Kmeti (renters)	79,677	28.15	444,920	32.11
5. Half-kmeti :				
a) Landowning kmeti	14,453	5.10	95,296	6.88
b) Kmeti landowners	16,963	5.99	110,448	7.97
6. Agricultural labourers	20,450	7.22	43,351	3.13

Of all the agrarian questions affecting Bosnia and Herzegovina the most important is the abolition of the feudal régime. The above table shows that it is represented by classes 1, 4, 5*a* and 5*b*. If we eliminated these three classes the feudal system would be abolished. And as class 1 has disappeared almost entirely while classes 4, 5*a* and 5*b* are gradually being transformed into class 3, one can foresee the time when the abolition will be practically completed. From 1879 to 1910, 28,481 *kmeti* were enfranchised, or 890 each year. Now supposing that enfranchisement proceeds as slowly in the future, and that no fresh recruits be made to the class of *kmeti*, it will have disappeared completely in 125 years, that is to say in the year 2135.

Official statistics do not supply data on the area of the several landed estates. According to those gathered by Prof. Grünberg for the *kmeti* and free peasants, the area of the lands cultivated by these two classes is as follows :

	Area			
	Not exceeding 2 ha.	From 2 to 5 ha.	From 5 to 10 ha.	From 10 ha. up
	%	%	%	%
Holdings of landowners and free peasants	51.48	25.39	13.71	9.40
Lands tilled by kmeti.	19.95	28.21	28.38	23.46

As is shown by this table, the area rented by *kmeti* is a little larger than that owned by small holders: 52 per cent of the holdings of the former exceed 5 ha. in extent and only 19.95 per cent cover an area of less than 2 ha.; whereas 51.48 per cent of those of the latter cover an area of less than 2 ha., and only 23 per cent exceed 5 ha. in extent.

This fact is readily explained. Small holdings, which arose from the enfranchisement of the *kmeti*, are gradually being subdivided among heirs, whereas the lands rented by the *kmeti* cannot be thus subdivided, or are subject to subdivision in a minor degree, because the division of such lands among the heirs cannot be effected without the consent of the landowner.

The available official statistics on the membership of the several families afford indirect evidence of such subdividing process. In 1910 a family of free peasants consisted on an average of 4.63 individuals, whereas a family of renters consisted of from 5.59 to 6.54.

The religious statistics for the agricultural population are very interesting.

The official statistics for 1910 give the following particulars on this head :

	Religions							
	Orthodox	%	Mohammedans	%	Catholics	%	Others	%
1. Large landowners renting their estates to *kmeti* . .	633	6.05	9,537	91.15	267	2.55	26	0.25
2. Large landowners cultivating their own lands. .	760	17.95	3,023	70.62	458	10.70	40	0.93
3. Free peasants	35,414	25.87	77,518	56.65	22,916	16.74	1.006	0.74
4. *Kmeti* (renters).	58,895	73.92	3,653	4.58	17,116	21.49	13	0.01
5. (a) Landowning *kmeti*. .	7,462	51.63	1,458	10.59	5,333	38.28	—	—
(b) *Kmeti* landowners. .	9,322	54.96	1,223	7.21	6,418	37.83	—	—
6. Free labourers	6,266	30.64	9,226	45.12	4,189	20.48	769	3.76

The above table shows :

(1) That the majority of the great estate holders are Mohammedans. Only 8.85 per cent of the large estate owners of the first class and 29.98 per cent of those of the second class belong to religions other than the Mohammedan.

(2) That the majority of the small holders are likewise Mohammedans, although the percentage of small holders who are not Mohammedans is considerably more important than is that of large landowners (45.35 per cent).

(3) That the *kmeti* class (class 4) and that of the half-*kmeti* (5*a* and 5*b*) belong mostly to the Orthodox religion (73.92 per cent of class 4, 51.63 per cent of class 5*a*, 57.96 of class 5*b*). Next to the Orthodox, who are the most numerous, come the Catholics (21.49, 38.28, and 37.83 per cent); whereas the Mohammedans belonging to these classes are an insignificant minority.

This shows that the agrarian question is of importance not only from an economic and political but also from the religious standpoint. The Mohammedan population is quite unaffected by the feudal régime (77,518 free peasants and 3,023 large land-owners who do not lease to *kmeti*) are opposed to all change of the régime (9,537 large land-owners leasing to *kmeti*) ; on the other hand the Orthodox and Catholic population have always been opposed to the feudal régime and favour the enfranchisement of the *kmeti*.

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The feudal agrarian régime which for so long prevailed throughout Europe may now be said to have nearly ended. It fell with the overthrow of the " ancien régime " as being the greatest obstacle to national economic development. At present it is only represented by rare exceptions.

The agrarian system in Bosnia and Herzegovina with its feudal characteristics is therefore condemned to disappear. The fact that any increase in production determined by more intense labour on the part of the tiller of the soil, is divided between him and the landowner who has contributed nothing to this increase, does away with all stimulus to intensive farming, and therefore the abolition of this agrarian régime, that is to say the enfranchisement of the renters and their conversion into freeholders, is favoured both by men of science and by practical farmers.

As to the main question, the abolition of the feudal régime, all are agreed ; not so as to the means of bringing it about. Some favour immediate action, by means of compulsory purchase ; others advise gradual conversion by means of optional purchase, and call for State intervention only to stimulate voluntary agreements between the parties concerned.

The facts above set forth show that government circles were in favour of the latter plan. Thus we see that the first Turkish government, before the Congress of Berlin, and afterwards the Austrian, introduced optional purchase.

The statistical data above set forth show however that the results thus secured have not been satisfactory. The partisans of compulsory purchase quote these data to prove that the agrarian question in Bosnia and Herzegovina cannot be settled by a policy of optional purchase which should be replaced by compulsory redemption ; whereas the partisans of voluntary action maintain that the unsatisfactory results so far obtained are accounted for by administrative errors in carrying out the scheme, and that if these errors were eliminated the desired results would be obtained.

We will not enter further into this discussion ; we will only ask a question. May we expect that in future voluntary purchase will proceed more rapidly than in the past ?

Before replying some facts must be elucidated.

We have already noted that in 1910 the Mohammedan deputies presented a Bill in opposition to that introduced by the government in the Bosnian parliament. It is true that this proposal led to no results ; nevertheless it reveals the views of the great Mohammedan landowners who constitute 91.15 per cent of the large estate holders. It shows that they are all opposed to the abolition of the feudal régime, and inclined to strengthen it more and more.

Of late years there has been an increase in the number of lawsuits brought by landowners for the purpose of rescinding leases with their *kmeti* and driving them off their lands for failure to fulfil their obligations under the lease. The number of such lawsuits in 1910 was 924.

It is a fact that the *kmeti* frequently fail to carry out their duties ; but while formerly their landlords summoned them only to enforce respect of these, in recent years their aim has been to have the tenants evicted so as to free their lands of obligations towards them. Students see in this fact the effect of the increase in land values, and hence in the rentable value of farms, lands free from all services being more valuable than those subject thereto. Therefore, if redemption remain voluntary it will not be effected more rapidly than in the past.

As the value of the land increases the number of lawsuits for the eviction of tenants increases, as also the cost of purchase, and consequently the indebtedness of the purchaser ; so that the economic status of the latter grows worse.

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During the first years of the Austro-Hungarian occupation the partisans of compulsory redemption favoured so-called distributive redemption: that is to say the lands were to be divided between the landowner and the tenant in the same ratio as the products of the farm had hitherto been divided, usually that of 2 to 1 ; the landlord in most cases having a right to one third. This idea was gradually dropped owing to the following difficulties in carrying it into effect :

(*a*) As the size of the rented farms was relatively small and the *kmeti*

family numerous, this system of division would have entailed excessive subdivision of the land.

(*b*) The system of assigning to the landowners one third of all rented farms would have led to scattered ownership which would have rendered cultivation very difficult if not impossible.

These considerations have led to the adoption of the principle of complete purchase, that is to say of leaving the renter in possession of the land, and of compensating the owner in money.

In conclusion, mention must be made of an argument brought forward in the government report for 1906, and frequently quoted against compulsory purchase, i. e. that by replacing rent in kind by a cash rent the economic ruin of the great landowners would be brought about, as they are extravagant and incapable of investing their money advantageously.

This danger, however, could easily be avoided by converting rent in kind into rent in money represented by government bonds.

But even if the fears expressed by the government report were to be realized, would this be an adequate reason for not reforming the agrarian régime? We have, on the one hand, 10,463 large landowners, representing 40,460 individuals composing the class opposed to the reform, because they maintain that they could not manage to live if their real estate were exchanged for personal estate; and, on the other hand, we have 111,093 *kmeti* representing, with their families. 650,644 individuals, who in the economic interests of the country favour the reform. The answer to the question is therefore not difficult to formulate.

OTTOMAN EMPIRE.

CO-OPERATIVE COLONIZATION IN PALESTINE.

SOURCE.

OPPENHEIMER (Dr. Franz): Genossenschaftliche Kolonisation in Palestina (*Co-operative Colonization in Palestine*). Cologne, Nationalfonds-Bibliothek, 16 pp. undated.

Modern Zionism as a national political movement dates, as is well known, from about 1870; but it is only since 1890 that it has gathered strength, that is since the date when Th. Herz of Vienna, who was born in 1860 and died in 1904, became its leader. To him is due the fact that Zionism from an ideal and an aspiration has begun to be a reality. On his initiative the first Zionist congress was summoned to Basle in 1897; and there, for the first time, the Zionist programme was formulated. "Zionism", ran the manifesto, "proposes to constitute in Palestine a home, safeguarded by legal rights, for the Jewish people, especially those of them who will not and cannot be assimilated by other races. To obtain such end this congress proposes the adoption of the following measures:

"(1) to promote the colonization of Palestine by sending thither Jewish peasants, labourers and craftsmen;

"(2) to isolate, and afterwards to unite together in groups, persons belonging to the Jewish race, by means of especial local and national institutions and in accordance with the laws of different countries;

"(3) to strengthen the national sentiment and national consciousness of Jews;

"(4) to take the necessary steps in order to obtain from the government the measures which will allow the aim of Zionism to be attained."

The second congress was, like that at Basle, concerned with the fulfilment of this programme and with the financial measures which it entailed.

Among other projects that of founding a Jewish national bank, to be situated in London and called the Jewish Colonial Trust and to have a capital in shares of two million pounds sterling, was discussed and approved.

At the fifth congress, held at Basle in 1901, it was decided to constitute a National Fund with a capital of 200,000 pounds sterling to be collected by voluntary contributions. Half of this fund should serve to buy

land in Palestine, while the other half should remain the inalienable and collective property of the Jewish people.

In 1903 there was another congress at Basle. At this Franz Oppenheimer, *Privat Docent* at Berlin university, brought forward a proposal that the colonizing enterprise should be established on a new basis, namely that purchased land should not become private property but should be cultivated on a co-operative system.

In support of his thesis Dr. Oppenheimer pointed out that the institution of private property had, in Palestine as elsewhere, the well known effect of transforming landowners into speculators, who dealt in land as in any other form of merchandize, and were ready to sell so soon as they saw a prospect of profit, without any regard to patriotic sentiment, "that granite foundation of every nationality". He stated that private ownership had the further defect that it sowed discord among the members of one nation. In their pursuit of lucrative business landowners had employed Arab labourers, as being more docile and less expensive because less civilized than their own Jewish compatriots, and had thus encouraged Arab influence in the Jewish colonies of Palestine.

Dr. Oppenheimer was very willing that there should be friendly relations between Arabs and Jews, that the two peoples should mutually aid each other in order that the land might be better cultivated and wealth more widely distributed. "The Jew, who has evolved to the higher stage, should be the friend and the master of the Arab, who is healthy and strong but whose development is backward because of the unfortunate political conditions in which he lives. In our colonies it is however essential that Jewish peasants should drive the plough and pasture the cattle, for not otherwise can the land be won permanently".

The plan would not, he urged, injure the Arabs but would on the contrary be most advantageous to them; for the two peoples would together greatly increase the productivity of the land, and thus enhance its value and its capacity to support a numerous population.

Co-operative organization was the alternative to private property. At the very beginning of their history the Hebrews were organized on a co-operative plan. It was by a co-operative war that, under Joshua, they conquered the Promised Land; it was on the co-operative principle that they afterwards divided it among the twelve tribes; and within each tribe the land should have been, according to the principle of the Mosaic law, owned co-operatively.

The land did not belong to the people absolutely for "it is given to them for an habitation", and the individual could not, as in Roman law, dispose of it as he chose, making good or ill use of it.

But these laws of God, which were also the laws of wisdom and nature, had not been followed. The Hebrews, like the other Mediterranean peoples, suffered the institution of private property and the formation of large properties. "Woe unto you if ye add property to property, leaving none for others, and yourselves inhabit the land alone".

The speaker stated further that with the institution of private property

began the period of the sufferings of the people of Israel. The ties uniting the tribes became looser ; the population decreased ; the land became depopulated ; the people became " Ahasrer ". If they were to return to their ancient land it was necessary that they should learn and observe the ancient law, according to which the individual inherited only a tenancy of the soil ; while the land belonged to the community of the people as a social property.

All the history of the past, and all modern experience of colonization in Palestine, led to the same conclusion, namely that co-operative colonization was the most fruitful form of colonization. It was the latest discovery of economic science as it had been the earliest principle of public law among the people of Israel.

The proposal of Dr. Oppenheimer was approved by acclamation by the congress of 1903, but seven years passed before it was possible to begin to realize the project of co-operative colonization.

In 1900, at the ninth Zionist congress, held at Hamburg, in order to facilitate the new colonizing policy a co-operative fund was formed which in a year reached the sum of 145,000 francs. A colonizing society called " Erez Israel " (Land of Israel) with limited liability, was instituted to administer this fund.

This society aims, according to Article 3 of its statutes, at " the foundation of co-operative agricultural and urban colonies of all sorts, in Palestine and adjacent countries ". The society's superintending council, of which Dr. Oppenheimer is president, has members in Germany, Austria, Russia, Holland and Palestine.

To secure the funds necessary to it the " Erez Israel " issues shares of a minimum value of 500 markes, fixed by law. Anyone who wishes to have a part in the enterprise by means of a less payment can obtain for 80 marks a certificate of participation, given to him by the organization of the National Fund, the official representative of the shareholders in all the society's meetings and the distributor to them of their dividends. Bonds for sum of even less than 80 marks are issued by the National Fund in favour of the co-operative colonizing societies. In view of the necessity of collecting large sums of money the collaboration of private farmers and capitalists is indispensable in Palestine. Co-operative colonies can be founded among private farmers, after the pattern of the collective farms in Italy and the farmers' co-operative agricultural societies in Rumania, regard being of course paid to the local peculiarities which may discover themselves.

In respect of co-operative colonization Dr. Oppenheimer gives the following picture of the work for which " Erez Israel " is destined.

He wishes the co-operative colonies to be of two kinds : provisional colonies for the occupation of the land ; and permanent groups of colonists to be lastingly attached to the soil, especially in the fertile and well watered districts east of the Jordan, where competition has not yet raised the price of land beyond the profit level, and which are not densely populated by natives. The enterprise could be set on foot even west of the Jordan, but

the price of land in this district has become so high that its purchase is not economically justified.

The action of the Hebrew organization, when it buys land for motives not purely economic, has had in these regions an effect identical to that produced by the action of the German colonization commission in the Polish provinces of eastern Prussia, where colonizing enterprise, untertaken also for motives other than economic, resulted in a disastrous rise in the price of land.

The co-operative colonists who occupy the land are relegated by Dr. Oppenheimer to the task of preparing it for permanent and definite colonization and a stable colonist population. As soon as the occupying colonists have bought the land it should be brought under cultivation, in order to prepare the way for the co-operative colonists who will settle in it. The difficulties to be overcome are numerous and the author is fully aware of them. The members of a co-operative colony will have a hard task before they can reap the fruit of their labours. Lands will sometimes be occupied in the unsafe districts infested by Bedouins and Kurds, who recognize no right but that of the stronger. The occupying colonists must therefore be not timorous folk but fighting men, strong, capable of self-defence, distributed in groups of not less than a hundred and determined to exact respect from the hardy sons of the desert. They must be young, filled with the adventurous spirit which leads men to build their homes on the confines of civilization, forearmed against danger, and resolved to sacrifice their lives with enthusiasm. Only thus will " the work be worthy of the master and Heaven's blessing descend on it ".

When the land has been brought under permanent cultivation the co-operative occupying colonists have performed their task, and will move to more remote regions in order once again to discharge their mission of civilization. In the colony, henceforward permanently settled, the older and married men will remain as a stable population.

The permanent co-operative colonies must possess live stock, tools, food stuffs, chemicals, surgical instruments, materials for building houses, portable forges and every sort of implement. An expert agriculturist, a doctor, nurses, workmen, and, gradually, all the essential members of a community, will have place among them. According to Dr. Oppenheimer there is no fear of a scarcity of persons desirous of joining a colonizing expedition. Many will be attracted by the " freedom which the pioneers will enjoy " ; many by the romantic side of this enterprise, that for which strength is needed. " On the very confines of civilization, in the hard fight for life, men will grow up who will be tempered like steel and vigorous women of whom any race might be proud ".

So much for the future. Attempts have however already been made to realize these projects.

In the spring of 1911 " Merchawja ", the first co-operative colony, was founded at Emek Israel near Haifa, in the neighbourhood of Nazareth. Its property, which has an area of 3,500 duman — some 321 hectares — and is fertile land, was bought by the Jewish National Fund.

In fulfilment of its contract with the co-operative colony the National Fund also built all the dwelling houses and other buildings necessary to the cultivation of the property.

The colony is directed by an expert agriculturist, and is cultivated by a co-operative labourers' society which has about twenty members, with whom some fifteen wage-earning labourers are associated. The latter are however intended gradually to become members of the co-operative society.

In its first years the colony had to struggle against many difficulties, particularly of a non-economic character. Frequent attacks of neighbours and of Bedouin tribes were repulsed only at the price of sacrifices in lives and property. The neglect of centuries had reduced the land of settlement, fertile as it naturally was, to such a condition that much capital and labour were expended before it could be restored to cultivation. Large quantities of manure had to be transported and new methods of scientific culture employed. It was only after three years of hard and unceasing work that the period of mere occupation could be considered at an end. Thanks to all the measures which were taken the value of the farms has now largely increased, and will increase yet further when the Haiffa-Damascus-Jerusalem railway, now being constructed, on which the " Merchawja " colony will be an important junction, has been completed. This line will greatly facilitate the transport of the colony's agricultural products to centres of population.

The second of these colonies of agricultural labourers, " Dagania ", which also was founded on the Jordan by the National Fund, became a co-operative colony as the result of a decision of the general assembly of the society on 2 June 1911. Many other co-operative colonies, which also owe their foundation to the National Fund, will be recognized and administered by the co-operative colonizing society — among them the co-operative colony for re-afforestation called " Gau Sehumel " (Samuel's Garden) and founded at Chedera in 1913 on land bought by the National Fund.

All this enterprise needs much capital ; and the colonizing schemes cannot be carried out until an increasing number of shares in the co-operative colonies and of bonds of participation in the National Fund are taken up by Jews, and until a greater number of contributions are received.

Only then will the programme of co-operative colonization approach fulfilment. Then the Hebrew people will be able to return to their ancient and lost land, and once more live united under the law of its co-operative tribes. " Therefore shall ye keep all the commandments which I command you this day, that ye may be strong,... and that ye may prolong your days in the land ".

GREAT BRITAIN AND IRELAND.

ENQUIRY INTO THE RATE OF WAGES PER ACRE IN ENGLAND, 1913-1914.

(*Concluded*)

By W. H. R. CURTLER.

§ 7. FEMALE LABOUR.

The northern counties, with Scotland, have long enjoyed the reputation of being the districts where agricultural wages are highest. But is this reputation quite deserved? It is in these counties that a large proportion of farm work is still done by women, who work for lower wages than the men, at the average rate of 1*s.* 6*d.* per day. They even do such work as spreading manure (1), and loading the dung carts, and in some districts "do almost all work except that in which horses are required", but work as a rule two hours a day less than the men. It is curious that women's labour should be so much employed in the north, which in modern times has been in the van of industrial progress. The employment of women and children in farm work, in England, was said to be a feature of the period between the Reform of the Poor Law and the Education Acts, 1834-71, and was only justified by the fact that the labourer had lost his parish allowance and was receiving low wages, and therefore had to put his family to work (2) to eke out his scanty pay. Yet in the northern counties today we find women employed in farm-work where wages are very high.

In Northumberland and in parts of Durham these women workers are the descendants of the "bondagers", which term is described in the Report on the Employment of Women and Children in Agriculture of 1867-8 (3)

(1) In one district women are said to do «any kind of farm work», earning 8/- to 9/- a week, with free cottages and a pint of milk, and 3/- a day in harvest; hours 7 a. m. to 5 p. m.

(2) HASBACH, *English Agricul. Labourer*, pp. 224, 266. Hasbach says, p. 251, that in the fifties «the employment of women and children lowered men's wages.

(3) First Report, p. XIII.

as then becoming unpopular. Under the "bondage" system the hind was "bound to find the work of a suitable woman whenever she was needed", receiving her earnings, and engaging to give her wages, lodging, food, and washing, a system which in 1867 was said to be dying out, though it still exists. These women turned their hand "to every description of work on the farm including barn work, which is described as the hardest" (1).

Their successors to-day do not work as hard as this but they do a much larger proportion of farm work than women do elsewhere and this fact should be taken into account when the northern counties and Scotland are quoted as paying high wages.

Further, in Northumberland and Durham a large proportion of the male labourers are horse-men, cattlemen, and shepherds, who receive higher wages than ordinary labourers.

One or two of our correspondents have stated that female labour is becoming unpopular even in the north, but that it is still largely prevalent is proved by the census returns of 1911, from which we have selected for contrast some northern, eastern, and midland counties

County	No. of Agricultural labourers Male	Female
Durham	5,723	691
Westmoreland	2,215	62
Northumberland	7,383	1,865
Norfolk	36,475	351
Lincoln	38,866	607
Oxford	12,336	62
Berks	10,920	116
Northants	13,621	68

§ 8. High wages and low wages.

Another point, often discussed before, arising in connection with this enquiry is whether high wages are more economical than low wages (2).

There is no gainsaying the fact that the counties where high wages are paid, viz. the northern counties, Lancashire, Cheshire and Derbyshire, are those which have a large percentage of their cultivated land in permanent grass; and the low rate of wages per acre to be observed in their case is

(1) The work was almost exclusively performed by the unmarried women living in their own homes. (Report of 1867 p. XIII). The Commissioner was strongly of the opinion that the work was not degrading nor injurious, and produced remarkably healthy, contented women.

(2) In the report of the Royal Commission on Agriculture 1894-7 (Qu. 61, 251) it is said "the man from the north, even at his high wages, was an economical gain to the farmer", and Professor Sheldon said, "I believe the effect of labour being a little higher paid than it used to be is that it is more efficient". (Qu. 21, 961).

largely due to this fact. We have discussed the connection of high wages and laying down land to grass elsewhere (1).

The two great corn-growing counties of Norfolk and Lincoln perhaps throw some light on the question of the comparative economy of high and low wages, as the cultivation in them is very similar. The weekly earnings of the ordinary labourer in Lincolnshire (January 1914) were £ 1. 0*s.* 11*d.*; in Norfolk 17*s.* 7*d.* The rate per acre in the former on 21 farms examined is £ 1. 6*s.* 3*d.*, in the latter on 31 farms examined £ 1. 13*s.* 8*d.*

These figures tend to show that high wages are more economical than low wages.

Do the counties where high wages are paid and the workers thereby rendered more efficient, produce more per acre than the counties where low wages are paid ? The following table gives some answer to this question although the differences in soil, climate, and management must be taken into account. Nor must a particular crop in particular counties be taken as a test, but the total produce of various crops in groups of counties.

Of wheat and barley the highly paid labourers produce more than the low paid, although the latter are more favoured by climate. In the case of oats there is little to choose. Beans are too little grown in our high wage counties to afford useful comparison.

In the production of potatoes the superiority clearly lies with the high wages, as it does in that of turnips and swedes. In mangolds there is little difference between the two groups, but in the growing of hay, especially that from rotation grasses, the well-paid labourers easily beat their less fortunate rivals. The figures for Norfolk and Lincoln, in connection with what has been said above, are interesting. In each crop, except turnips and swedes, the production in Lincoln is superior to that of Norfolk. The table, in brief, seems to show that where men are well paid they produce more from the soil at a less cost than where the reverse is the case (2).

We have not compared the production of live stock, because the varying amount of heath and down land in the different counties prevents comparison. Nor are there any statistics of the production by counties of milk, butter and cheese.

The greater part of the food of our live stock is grass in one form or another, and the produce of our grass land depends much more on the fertility of the soil and less on manual labour than the produce of the arable land.

(1) See Appendix D. as to the male labour per 100 acres of cultivated land.

(2) This may seem to conflict with the statement made above that the modern comparatively well paid labourer does less work than his ill paid predecessor, but the causes, there stated, which have apparently reduced the modern output of the labourer must not be forgotten.

Produce per acre of certain crops for period 1904-13, *in high wages counties.*

County	Weekly Earnings Jan. 1. 1914 — £ s. d.	Wheat		Barley		Oats		Beans		Potatoes		Turnips and Swedes		Mangolds		Hay Rotation		Hay Permanent	
		Acres	Yield per acre — Bush.	Acres	Yield per acre — Bush.	Acres	Yield per acre — Bush.	Acres	Yield per acre — Bush.	Acres	Yield per acre — Tons.	Acres	Yield per acre — Tons.	Acres	Yield per acre — Tons.	Acres	Yield per acre — cwt.	Acres	Yield per acre — cwt.
Derby	1. 6. 9.	6,134	33.48	4,633	34.28	18,760	36.60	117	27.97	2,528	6.03	8,621	16.04	4,168	22.52	14,738	31.45	137,593	25.60
Northumberland	1. 6. 6.	6,655	35.98	29,271	35.61	39,167	36.66	1,009	31.02	5,796	6.25	32,779	15.87	476	14.58	37,051	33.06	88,699	29.97
Durham	1. 7. 0.	14,007	33.95	16,669	36.71	31,169	37.15	873	23.93	12,120	5.14	19,051	14.75	649	16.56	33,713	33.77	107,182	22.67
Westmoreland	1. 4. 0.	82	33.11	437	32.54	13,548	34.84	—	—	1,256	5.78	5,382	15.71	559	18.76	6,970	38.60	66,445	35.54
Yorkshire (Whole County)	1. 2. 2.	E. R. 69,145	30.58	75,278	33.04	84,971	41.65	7,059	23.36	11,596	5.42	73,578	11.56	9,413	13.43	20,433	28.61	47,669	20.95
		N. R. 28,425	31.70	71,458	34.34	67,583	37.70	2,497	26.82	11,868	5.83	49,962	15.58	6,788	18.78	41,433	30.79	155,612	22.75
		W. R. 50,522	29.80	49,754	33.93	74,407	39.77	1,032	23.30	25,815	5.25	47,589	11.99	7,742	16.26	41,943	27.54	273,655	23.30
Lancaster	1. 2. 11.	30,741	35.89	3,261	35.38	66,517	42.61	152	27.09	45,826	7.91	7,153	17.78	2,105	18.52	62,482	45.74	203,207	36.87
Lincoln	1. 0. 11.	175,001	34.23	201,170	33.98	116,718	48.50	41,579	23.49	81,777	6.32	102,643	11.84	23,794	20.88	77,088	30.44	107,220	24.05

Do. in Low Wage Counties.

Gloucester	17. 6.	47,329	29.75	25,032	30.34	28,276	37.06	6,790	28.81	2,732	5.23	23,868	13.83	6,283	24.65	44,770	26.86	166,828	22.99
Norfolk	17. 7.	123,525	32.50	188,113	32.87	75,914	47.22	12,061	30.02	17,201	5.60	104,645	11.83	55,955	16.18	126,275	26.27	51,325	22.15
Oxford	17. 0.	42,495	31.18	36,955	32.77	29,609	39.34	7,530	30.79	2,464	4.68	19,837	12.96	6,353	19.99	28,169	26.33	82,053	22.30
Berks		38,285	29.62	21,877	29.31	32,611	37.13	4,102	27.24	1,683	4.50	15,361	11.91	6,922	18.40	22,387	24.27	74,352	20.87

§ 9. The decline in area of arable land.

It is generally said that high wages mean more grass and less tillage because the farmer wants to cut down his labour bill, though whether this is true economy is doubtful in the face of Mr. Strutt's well known figures by which he shows that on some 2000 acres during a period of eighteen years the net annual profit per acre from the arable land was £ 2.1*s.* 7*d.*, and from the grass land 7*s.* 11d. However, there is no doubt that grass land, except in the case of dairying, requires much less labour than tillage. Mr. W. C. Little stated that, on the average, one acre of arable requires as much manual labour as from three to five acres of grass (1), and grass farming appeals to the farmer by reason of its safety and limited expenditure, as compared with the risks of arable farming. Our investigations show that the wages per acre on 44 farms mainly devoted to corn growing are £1.7*s.* 10*d.*, whereas on 61 farms mainly devoted to stock-rearing and feeding they are £ 1.0*s.* 0½*s.*, though on 72 dairy farms they are £ 1.6*s.* 8*o.*, and while the labour on grass land only is 10*s.* an acre, that on corn land only is £ 1.14*s.* 0*d.*

Now contrast the respective areas under tillage and grass in the high wage counties with those in the low wage counties (2).

High Wage Counties

County	Weekly earnings of ordinary labourers	Grass acres	Tillage acres
	£. s. d.		
Durham	1. 7. 0	287,085	141,653
Northumberland	1. 6. 6	519,290	181,608
Westmoreland	1. 4. 0	207.840	36,587
Derby	1. 6. 9	404,258	81,435
York W. R.	1. 2. 2	829,375	342,587
		2,247,848	783,870

Low Wage Counties.

Gloucester	17. 6	427,322	226,506
Norfolk	17. 7	287.899	777.828
Oxford	16. 5	210,742	200,399
Berks	17. 10	172,739	176,339
		1,098,702	1,381,072

(1) Report of Royal Commission on Labour, 1894 vol. V. Cd. 6894, p. 11. See also tables B. & C. at end of report. The report of the Board of Agriculture on Agricul. Depopulation estimated that the loss of 2,000,000 acres of arable land in Great Britain between 1881-1901 displaced about 70,000 labourers, or 3 ½ men to every 100 acres. (Cd. 3273, p. 11) but Lord Eversley stated to the Royal Statistical Society that the reduction in the labour force by this cause was 2 men per 100 acres. (See *Journal of Farmer's Club*, Nov. 1909, p. 886).

(2) Board of Agriculture Returns, Cd. 7325, 1914.

The great exception is Lincoln where, with the comparatively high wages of £ 1.0s. 11*d.*, the acreage in grass is 525,958 and that in tillage 995,613. Yet, from these figures it appears that high wages tend to the preference of grass to tillage ; although there are, of course, other important factors in determining the mode of cultivation, such as proximity to large towns, the nature of the soil, and the prices of corn and stock (1). The official circular of the Central Land Association for May 1914 states that " there is a certain truth in the statement that where there are high wages there is a smaller percentage of arable land ". And that farmers show a tendency to throw arable land down to grass when a rise in wages ensues is further borne out by the fact that in the six years 1907-1912 inclusive there was a decrease of arable land in England of 415,746 acres and in 1913 of 277,043 acres coincident with a considerable increase in wages (2).

§ 10. INFLUENCES AFFECTING THE DECLINE IN THE RURAL POPULATION.

What proportion of the decline in the numbers of the agricultural labourer is to be attributed to the conversion of arable land into grass, and what proportion is due to the introduction of machinery and less careful farming ?

Unfortunately the census returns of the number of agriculturists are in all countries very inadequate and England is no exception to the rule. The methods employed have varied from census to census, making accurate deductions impossible. The changes in the mode of classification between 1871 and 1881 were so radical that in making comparisons, all figures prior to 1881 are of little use. From that date onward, however, it is possible to analyze the figures, and the following table is the result of such analysis :

England & Wales.

Agricultural Labourers and Farm Servants including Shepherds (Males)	1881 —	1891 —	1901 —	1911 —
	830,452	756,557	609,105	643,117

The downward movement according to the last census appears to have been arrested, but it must be remembered that the census of 1901 was taken when about 40,000 agricultural labourers had gone to the South African War, and in the Census of 1911 there was a considerable transfer in the returns, amounting probably to 10,000, from " general ", to " agricultural " labourers. So that though the rate of decrease has been considerably

(1) Cr. A Wilson Fox, in *Statistical Society's Journal*, 1903, p. 283. " The arable counties are the low wage ones ".

(2) In Scotland, however, the Report on the Decline in the Agricultural Population 1906, p. 12, shows that the number of labourers decreased largely in spite of very small conversion of arable to grass. According to the Preliminary Returns of the Board of Agriculture for 1915 the increase in England and Wales of 362,610 acres in wheat, and 158,420 in oats was mainly accounted for by a decrease of 273,050 acres in barley, 113,330 in turnips and swedes, 27,490 in beans, and 39,460 in peas. The decrease in permanent grass was only 28,030 acres.

checked it was still proceeding according to the latest figures available, and there were 187,335 fewer labourers in 1911 than in 1881. A large proportion of this decrease is well known to be due to the conversion of arable to pasture.

	Acres
The permanent grass in England and Wales in 1911 was	15,949,603
» » » » » in 1880 . .	13,267,606
Increase . . .	2,681,997
Arable land in 1880 . .	14,096,176
» » in 1911 . .	11,299,220
Decrease (1) . . .	2,796,956

In round figures 2,800,000 acres of arable went out of cultivation which, allowing that 2 ½ men per 100 acres are displaced by the conversion of arable to grass, shows a diminution of 70,000 labourers between 1881 and 1911, from this cause. But the increase in dairying has somewhat discounted this decrease. In 1880 there were 1,854,513 cows and heifers in milk or in calf, in 1911 2,392,880, an increase of 538,376, and whereas, in the former period, only 70 milking cows were kept per 1,000 acres of cultivated land, in the latter there were 88 (2).

We have seen that dairying employs a considerable amount of labour and we will assume, therefore, in the absence of statistics that 10,000 of the above 70,000 have found work on dairy farms.

Deducting 60,000 from 187,335 (the decrease between 1881-1911) we find that 123,335 were displaced by machinery and less careful farming.

In concluding this report I beg to render most hearty thanks to Mr. C. S. Orwin who has advised and assisted me throughout in its compilation ; also to Mr. R. H. Row C. B. Assistant Secretary of the Board of Agriculture, and to Colonel Graigie, C. B. who have kindly given me most valuable help.

(1) A considerable amount of land is withdrawn from cultivation every year owing to the growth of urban and manufacturing areas.

(2) Agricultural Statistics 1911. Cd. 6021, p. 20.

Appendix A.

Summary showing number of farms in each class according to counties.

Mixed Farms.

County	No. of farms	Acres	Total Wages
			£ s. d.
Bucks	1	486	673. 9. 6
Cheshire	3	663	1,649. 6. 7
Cornwall	12	4,915	3,399. 0. 0
Derbyshire	3	714	799. 6.11
Dorset	2	1,218	1,300. 0. 0
Durham & Westmoreland	10	4,047	5,253.10. 8
Kent	3	1,203	2,795. 4. 0
Leicester & Rutland	10	3,125	3,368.11.10
Lincoln	6	3,028	4,029.17. 7
Norfolk (1)	13	7,054	12,231.11.10
Northampton	9	5,163	5,504. 5. 2
Notts	3	942	1,256. 1. 6
Oxford & Berks	19	12,107	14,726.12. 2
Shropshire	10	4,091	5,579.12. 0
Somerset	14	4,288	6,128.17. 5
Surrey	1	440	572. 0. 0
Sussex	6	4,573	6,605.12. 0
Warwick	4	1,526	2,074. 0. 0
Yorkshire	1	400	460. 0. 0
Hereford	1	354	340. 0. 0
	131	59,437	78,766.19. 2
		Per acre	£1. 6. 6

Stock Rearing & Feeding.

Bucks	6	2,426	2,243. 7.11
Cornwall	2	576	429. 0. 0
Durham, Nothumberland & Westmoreland	8	3,568	2,685. 0. 8
Gloucester	2	881	869. 0. 0
Hereford	2	416	420. 4. 2

(1) One in Cambridge.

County	No. of farms	Acres	Total Wages
			£ s. d.
Kent	1	223	240. 0. 0
Leicester & Rutland	9	2,849	2,603. 1. 6
Lincoln	1	478	565. 0. 0
Northampton	1	600	650. 0. 0
Oxon & Berks	1	1,550	1,963. 8.10
Shropsire	5	2,483	3,055.10. 4
Somerset	7	2,212	2,738.19. 6
Sussex	5	2,281	2,641. 2. 0
Warwick	9	2,718	2,342. 5. 4
Worcester	1	272	225. 0. 0
Derby	1	271	192. 0. 0
	61	23,804	23,863. 0. 3
		Average per acre	£1. 0. 0½
Dairying.			
Bucks	7	2,040	2,172.12. 8
Cheshire	3	505	957. 0. 0
Cornwall	2	658	845. 3. 1
Derby	2	845	1,317. 0. 0
Durham	1	256	371. 0. 0
Gloucester & Dorset (1)	9	2,807	3,515. 0. 0
Lancashire	2	398	672. 0. 0
Leicester & Rutland	3	781	1,060. 8. 1
Norfolk	2	474	973.16. 4
Northampton	2	550	457. 0. 0
Oxon & Berks	1	281	412. 2. 5
Shropshire	1	300	542.13. 7
Somerset	21	5,235	6,603.19. 2
Surrey	1	250	348.10. 0
Sussex	11	4,904	6,790. 9. 8
Warwick	4	1,262	1,784. 7. 8
	72	21,546	28,753. 2. 8
		Average per acre	£1. 6. 8.

(1) One in Dorset.

Corn growing.

County	No. of farms	Acres	Total Wages
			£ s. d.
Cornwall	4	1,360	1,494.16. 0
Durham	1	265	475.16. 0
Gloucester & Wilts	2	1,710	1,628. 0. 0
Lincoln	14	10,483	13,764. 2. 6
Norfolk	16	7,729	12,452.17. 0
Notts	2	730	852.13. 6
Shropshire	1	481	518. 7. 4
Sussex	2	1,174	1,628. 0. 0
Warwich	1	358	636. 7. 5
York	1	600	1,242. 0. 0
	44	24,890	34,692.19. 9
		Average per acre . . .	£1. 7.10

Potatoes.

Lancaster	4	948	2,553. 1. 7
Lincoln	4	1,464	4,392. 0. 0
Durham	1	190	280. 5. 0
	9	2,602	7,225. 6. 7
		Average per acre . . .	£2.15. 6

Fruit & Hops.

Gloucester (1)	1	122	852. 0. 0
Hereford & Worcester	17	3,638	19,017.17. 1
Kent	30	8,821	46,412. 8.10
Norfolk	1	570	2,219.13. 2
	49	13,151	68,501.19. 1
		Average per acre . . .	£5. 4. 2

(1) The labour bill on the arable & grass portions of these farms, 8,240 acres, at the rate of £1.6*s*.6*d*. per acre (mixed) comes to £10,918, deducting this from £68,501.19*s*. 1*d*. leaves £57,583.19*s*. 1*d*. So that 4,911 acres of fruit & hops cost £57,583.19*s*. 1*d*. or £11.14*s*. 6*d*. per acre.

Total of all Farms Except Fruit, Hops, & Potatoes.

	No. of farms	Acres	Total Wages
			£ s. d.
Mixed	131	59,437	78,766.19. 2
Stock Rearing & Feeding	61	23,804	23,863. 0. 3
Dairying	72	21,546	28,753. 2. 8
Corn growing	44	24,890	34,692.19. 9
	308	129,677	166,076. 1.10
		Average per acre	£1. 5, 7

Appendix B.

Weekly earnings (including allowances, perquisites etc.), of ordinary labourers, (excluding horsemen, cattlemen, & shepherds), in the counties examined in this report.

County	Board of Trade Return. 1907	Rural League Return. 1912-1913 (1)	Increase in 1913 Report on Changes in Wages (2)	Wages Jan. 1 1914 Calculated from two previous columns
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Bucks	16.11	18. 3	1. 6	19. 9
Berks	16. 8	16.10	1. 0	17.10
Chester	19. 0	1. 0. 2	1. 6	1. 1. 8
Cornwall	17. 7	19. 2	1. 3	1. 0. 5
Derby	1. 0. 5	1. 5. 3	1. 6	1. 8. 9
Durham	—	1. 5. 6	1. 6	1. 7. 0
Gloucester	16. 3	16. 6	1. 0	17. 6
Hereford	17. 1	17. 6	1. 0	18. 6
Kent	18.10	1. 1. 2	1. 6	1. 2. 8
Lancaster	19.10	1. 1. 5	1. 6	1. 2.11
Leicester	18. 9	19. 8	1. 3	1. 0.11
Lincoln	19. 5	19. 8	1. 3	1. 0.11
Norfolk	15. 4	16. 7	1. 0	17. 7

(1) Obtained from about 1000 replies to circulars.

(2) Cd. 7635. Since 1913 there has been a further increase in wages; see *Board of Trade Labour Gazette*, June 1915.

APPENDIX B (*Continued*).

County	Board of Trade Return. 1907	Rural League Return. 1912-1913	Increase in 1913 Report on Changes in Wages	Wages Jan. 1 1914 Calculated from two previous columns
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Northampton	16. 9	17. 3	1. 0	18. 3
Northumberland	—	1. 5. 0	1. 6	1. 6. 6
Notts	19. 5	18. 7	2. 0	1. 0. 7
Oxford	14.11	15. 5	1. 0	16. 5
Rutland	17. 0	1. 0. 0	1. 0	1. 1. 0
Salop	18. 0	19.10	1. 0	1. 0.10
Somerset	17. 3	18. 3	1. 0	19. 3
Sussex	17. 9	18. 2	1. 0	19. 2
Warwick	17. 2	17. 4	1. 6	18.10
Westmoreland	19. 1	1. 2. 6		say 1. 4. 0
York	19. 9	1. 0. 8	1. 6	1. 2. 2

APPENDIX C.

Rate of labour per acre in various counties, omitting fruit, hops, & potato farms, & counties where less than ten farms were investigated.

County	No of farms	Acreage	Total Wages	Rate per acre
			£ s. d.	£ s. d.
Bucks	14	4,952	5,089.10. 1	1. 0. 6
Cornwall	20	6,609	6,167.19. 1	18. 8
Durham, Northumberland & Westmoreland	20	8,136	8,785. 7. 4	1. 1. 7
Gloucester	11	4,263	4,878. 0. 0	1. 2.10
Leicester & Rutland	22	6,755	7,032. 1. 5	1. 0.10
Lincoln	21	13,989	18,359. 0. 1	1. 6. 3
Norfolk	31	19,005	32,025. 7. 8	1.13. 8
Northampton	12	6,313	6,611. 5. 2	1. 0.11
Oxford & Berks	21	13,938	16,102. 3. 5	1. 3. 1
Shropshire	17	7,355	9,697. 3. 3	1. 6. 4
Somerset	42	11,735	15,471.16. 1	1. 6. 4
Sussex	24	12,932	17,665. 3. 8	1. 7. 3
Warwick	18	5,864	6,767. 0. 5	1. 3. 1

Appendix D.

Number of labourers in counties examined according to census of 1911, *from* 10 *years old & over, & number of regular male labourers of* 10 *years old & over per* 100 *acres of cultivated land, (crops & permanent grass)* (1).

County	In charge of horses	In charge of cattle	Shepherds	Ordinary	Total male labour	Regular male labour per 100 acres	Females	Female labour per 100 acres	Weekly earnings of ordinary labourers Jan. 1 1914 (2)
						£			£ s. d.
Berks	2,451	1,416	524	6,529	10,920	3.13	116	0.03	17.10
Bucks	1,554	1,513	383	8,019	11,469	2.91	92	Insignificant	19. 9
Chester	2,944	2,176	60	8,845	14,025	2.64	429	0.08	1. 1. 8
Cornwall	1,929	874	64	7,563	10,430	1.73	158	Insignificant	1. 0. 5
Derby	1,506	1,113	59	4,929	7,607	1.57	107	do.	1. 6. 9
Durham	1,475	639	101	3,508	5,723	1.34	691	0.16	1. 7. 0
Gloucester	2,618	1,395	735	9,498	14,246	2.18	139	Insignificant	17. 6
Hereford	1,825	1,013	264	5,820	8,822	1.99	152	do.	18. 6
Kent	5,562	2,502	1,059	23,229	32,352	4.41	1,345	0.18	1. 2. 8
Lancaster	3,403	1,597	76	11,792	16,868	2.14	412	Insignificant	1. 2.11
Leicester	1,256	818	389	5,672	8,135	1.71	53	do.	1. 0.11
Lincoln	8,800	1,846	1,141	27,079	38,866	2.55	607	0.04	1. 0.11

Northumberland	2,056	482	1,163	3,682	7,383	1.06	1,865	0.27	1. 6. 6
Notts	2,005	906	199	6,082	9,192	2.09	75	Insignificant	1. 0. 7
Oxford	2,302	1,282	735	8,017	12,336	3.00	62	do.	16. 5
Rutland	290	84	120	1,142	1,636	1.85	9	Insignificant	1. 1. 0
Salop	3,318	2,124	443	7,808	13,693	1.92	247	do.	1. 0.10
Somerset	2,665	1,473	467	13,380	17,985	2.12	354	do.	19. 3
Sussex	4,884	3,826	856	11,475	21,041	3.23	149	do.	(3) 19. 2
Warwick	1,937	1,308	428	7,064	11,737	2.17	80	do.	18.10
Westmoreland	413	205	89	1.508	2,215	0.99	52	0.03	1. 4. 0
York E. R.	4,070	1,497	954	7,119	13,640	2.02	152	Insignificant	1. 1.10
N. R.	3,188	1,557	532	6,741	12,018	1.39	163	do.	1. 2. 2
W. R.	3,719	1,928	359	11,753	17,759	1.52	524	0.04	1. 2. 8
Whole County	10,977	4,982	1,845	25,613	43,417	1.60	839	Insignificant	1. 2. 2
England	—	—	—	—	—	2.42	—	—	1. 0. 7

(1) The labourers enumerated in the census returns are mainly regular labourers. Casual labourers whose normal work was other than agricultural would state the normal work in their census returns. Irish casual labour would be excluded from the English returns. Many smallholders, who occasionally do wage labour for farmers, would not return themselves as "labourers".

(2) In England agricultural labourers are usually classified as horsemen, cattlemen, shepherds and ordinary labourers. The latest return showing their respective weekly earnings is the Board of Trade Report on the Earnings and Hours of Labour in 1907 (Cd. 5460), which gives the following figures for the average weekly earnings of these four classes:

horsemen 18*s.* 9*d.*; cattlemen 19*s.* 1*d.*; shepherds 19*s.* 7*d.*; ordinary labourers 17*s.* 6*d.* These earnings have now considerably increased.

(2) The number of labourers in Sussex is remarkable especially the large number in charge of horses and cattle.

Appendix E.

Table showing cultivation of counties examined.

County	Total area under crops & grass	Arable	Permanent Grass	Rotation Grasses
	acres	acres	acres	acres
Berks	348,805	174,528	174,277	27,038
Bucks	394,002	128,590	265,412	18,907
Chester	530,255	191,210	339,045	67,809
Cornwall	611,695	311,772	299,923	148,513
Derby	484,550	79,461	405,089	18,406
Durham	427,950	140,379	287,571	38,712
Glos	653,466	224,256	429,210	65,326
Hereford	448,052	125,242	322,810	25,738
Kent	732,179	293,596	438,583	31,178
Lancs	787,381	236,220	551,161	69,598
Leicester	473,748	96,977	376,771	19,164
Lincoln	1,521,501	995,613	525,948	146,879
Norfolk	1,066,193	778,883	289,310	150,331
Northants	517,316	158,639	358,577	19,241
Northumberland	699,459	180,916	518,543	61,506
Notts	439,537	217,187	222,350	43,703
Oxford	410,686	199,048	211,638	34,524
Rutland	86,745	31,708	55,037	4,805
Salop	716,898	225,128	491,770	59,644
Somerset	848,541	162,398	686.143	33,611
Sussex	651,116	227,102	424,014	42,325
Warwick	505,314	140,335	364,979	26,181
Westmoreland	243,711	35,881	207,830	13,813
York	2,704,783	1,109.494	1,595,289	205,900

(1) Board of Agriculture Statistics 1914. Cd. 7926.

Appendix F.

(Test comparison between a particular county & the whole country) compiled by the Board of Agriculture.

	Cornwall	England & Wales
Total cultivated land (in 1913)	611,930 acres	27,129,382 acres
» arable » »	318,088 »	11,658,233 »
» grass » »	393,842 »	16,072,149 »
Total agricultural labourers (in 1911) * .	10,588	656,337
» sheep (in 1913)	356,067	17,130,286
» cattle (in 1913)	220,633	5,716,944
No. of labourers per 100 acres	1.73	2.42
Number of sheep per 100 acres cultivated land	58.2	63.1
Number of cattle per do.	36.1	21.1
No. of sheep per 100 acres pasture	121.2	106.6
No. of cattle per do.	75.0	35.6

Average weekly earnings of labourers in 1907.

	s. d.	s. d.
All classes	18. 4	18. 4
Cattlemen	18. 11	19. 1
Horsemen	18. 6	18. 9
Shepherds	19. 8	19. 7
Ordinary	17. 7	17. 6

* Excluding farmers' relatives.

ITALY.

ITALIAN FOREST POLICY AND THE RESULTS OBTAINED IN RELATION TO THE CONSERVATION AND RESTORATION OF FORESTS (*Concluded*).

§ 5. Encouragement of sylviculture and re-afforestation and protection of the woods of the communes, provinces and bodies corporate generally.

The forest policy inaugurated by the law of 2 June 1910, No. 277, desires the State not only to provide, as the principal object of its action, for the formation of a national forest domain within practical and prudent limits, but also by means of ample financial assistance to stimulate and encourage the communes and other bodies and individuals to carry out re-afforestation of underwood, brushwood, grass-grown or bare lands belonging to them, and to restore forests fallen into great decay.

The assistance which the State grants to this work consists in exoneration from taxes and in a premium for lands re-afforested and for the restoration of decayed forests.

Under the law of 4 July 1874 concerning waste communal properties and that of 1 March 1888 on re-afforestation and reconsolidation of mountainous lands in order to ensure the strength of the soil and regulate the course of the waters, the State was already able to subsidize the work by contributing two fifths of the expenses, but evidently it was here a question of *compulsory* and not optional re-afforestations, to which latter the ministry up to 1910 could only contribute by the free supply of seeds and seedlings.

The results hitherto obtained in this direction however are not such as to fulfil all the expectations entertained. Though the proposals and applications to the ministry for a free scheme of re-afforestation were by no means few in number, those who, when they received the schemes, carried them into effect, were a small minority.

From data collected it is ascertained that the total area intended for re-afforestation in the applications is 13,951.91 hect. divided among 540 owners, of whom 489 are private individuals, 16 communes and 15 parishes and forest societies and bodies.

The area actually exonerated from tax and apparently re-afforested is 1,207.66 hect., but it should be noted that in respect of 634.43 hect. the re-afforestation was begun in the five years preceding the promulgation of the law on State forest domains, *i. e.* before 1910. In the same area of 634.43 hect. moreover there are included the lands re-afforested under the law of 1904 for Basilicata, the law of 1906 for Calabria and the consolidated law of 1907 in favour of Sardinia. This proves that even the provisions contained in these laws had exceedingly small influence in promoting re-afforestation by private persons.

As regards the communal lands, from the point of view of re-afforestation it should be noted that the communal administration did not find in the communes and other bodies the necessary collaboration for restoring the communal forest property now devastated or destroyed by reckless pasturage, felling and the absence of any sense of practical economy as applied to the forest. Suffice it to say that of 14,000 hectares of land re-afforested or restored, referred to in the applications for exemption from taxation, only 2000 belong to the communes and bodies corporate generally.

What has been said about the communes might be repeated with reference to private owners, with the qualification that the latter are not called upon to defend the general interests of the country at a sacrifice to themselves.

It is indeed exceedingly difficult to find a method of reconciling the general interests of re-afforestation and the objects of the forest administration with those of private owners.

* * *

The free distribution of forest seeds and seedlings for the re-afforestation of privately owned lands is an expedient which the Ministry of Agriculture has adopted since 1873. The forest nurseries affected did not exceed ten in 1873, but in 1886, they were already 35, with an aggregate area of 34.44 hect., and capable of an average annual production of 2,400,000 plants. On 30 June 1910 government forest nurseries which had come under the administration of the domains department were 32, aggregating 82.70 hect. with an average total productive capacity of about 20 million plants.

The law of 2 June 1910, which at last included exemption from taxes and an adequate money premium among the incentives to private re-afforestation, maintained the free supply of seeds and plants required, rendering it obligatory for the ministry under the first paragraph of Article 29. It was therefore necessary to provide straightway for an increased production of young trees by extending the existing nurseries and establishing new ones, and therefore the area of the 32 nurseries belonging to the Forest State Department which, as we have said, was 82.70 hect. on the promulgation of the law of 2 June, was increased to 89.24 hect.. Meantime there had passed into the hands of the department the association nurseries, those planted by other bodies and those established by the State under special laws. With the new nurseries established in 1911, a total was reached of 168 with an aggregate area of 327.77 hect., for which

there has been spent about half a million liras a year from 1913-1914 onwards, while in the years 1910-1913 the expenses were much greater owing to fresh plantations of nurseries and the extension of those already existing.

With regard to the distribution of seeds and young forest trees, it is observed from the diagrams contained in the report of the department that in the autumn and spring of 1910-1911 the young plants supplied attained the number of 15,631,720, and the seeds a weight of 8428 kilograms. For the plants the figures rise rapidly after the application of the new provisions of the law of 1910, and at the end of 1914 they approximated to 30 million.

It being found however, in the period following on 1911, that some nurseries were not adapted to their purpose, either from the cultural or economic standpoint, their number was reduced, so that in 1914-1915 we find only 149 nurseries (with an aggregate area of 310 hectares) instead of 168 as in 1911.

* * *

The enactments for the protection of forests belonging to communes, provinces, agricultural universities, public institutions, associations, limited companies and bodies corporate generally, form an important part of the law of 1910, inasmuch as they aim not only at the conservation but also at the scientific management of the greater portion of the forest property still owned by the nation. The forests managed by the communal administrations, in the form either of patrimony or domain, cover an area of about two million hectares and represent very considerable interests of the communes and mountain populations.

The first paragraph of Article 24 of the law of 1910 denotes a very considerable advance on the provisions of the law of 1877, its object being substantially to solve the Italian forest question in great part. While Article 4 of the law of 1877 compelled all owners of forests under legislative restriction as to deforestation to observe the regulations in force in each province, the law of 1910 requires, in respect only of forests belonging to communes and other bodies generally, that their utilization should take place in conformity with an economic plan prepared for each wood so as to guarantee not only reproduction and therefore continued existence, but likewise observance of the dictates of forest economy in such wood.

By successive circulars the Ministry of Agriculture is putting pressure in every way upon the public officers and bodies called upon to apply the new law, in order that it may be enforced immediately and completely.

Communal forests in general have here been spoken of, but special examination is deserved by the *domanial forests of communes* because, to the general causes of destruction and mismanagement there are added in their case special causes arising from the legal nature of this immense property. In the south the forest question is so intimately bound up with the question

of domains as to form a single vast problem involving the entire question of the economy of the mountainous regions of southern Italy, which problem, though placed long since before the governing classes, has for many reasons not yet received a solution.

We cannot here enter into a detailed examination of this complex and exceedingly important matter which involves and raises difficult questions relating to the economic and social structure of southern Italy; we would only say that in any case to the law of 1910, though it did not solve this grave problem, is due the credit of propounding it in a clear form.

The above law, in its portion relating to the protection of woods belonging to communes and bodies corporate, provides that: " Wooded lands or those capable of forest improvement belonging to the communal domain of the Neapolitan and Sicilian provinces, which for any reason are neither made use of for public utility nor beneficial to the generality of the citizens of the communes in whose territory they are situate, may be released from the domanial restriction and handed over to the Forest Department, which will undertake their management and extension on the basis of special agreements ".

The enforcement of these enactments is impeded by immense difficulties, above all because it is no easy task to ascertain and declare what lands serve no purpose of public utility or whether or not any lands are beneficial to the generality of citizens. Nor is there any definition of the legal relations which should would eventuate between the State and the communes where the law prescribes that the communal domains must be handed over to the department. Further, with regard to the special agreements referred to in the law, it must be noted that the regulations of 19 February 1911 direct that the net revenue to be paid by the State to the commune for the occupation of the domain must be used in the *manner prescribed by the Ministry of Agriculture.* The result was that no commune was willing to submit to the condition that the Ministry of Agriculture should be the judge of the mode of use of the revenue allowed. Evidently therefore forest legislation in reference to the communal domains of the south requires amendment in many respects. This was the purpose of law No. 1002 submitted by the minister Nitti to the Senate at the sitting of 3 May 1913, and dropped at the close of the session.

§ 6. The re-afforesttion associations.

The first Re-afforestation Association of a continuous character was instituted by royal decree of 17 May 1872 between the State and the province of Cuneo. The decree is of the following tenour:

Article 1. There is established at Cuneo a forest committee the object of which is:

(*a*) to designate those lands in deforested and denuded provinces, the nature and situation of which contribute to the deflection of watercourses with resulting damage;

(*b*) to designate other lands in which forest cultivation is desirable;

(*c*) to undertake re-afforestation, concluding agreements for that purpose with communes, bodies corporate or private persons, both in reference to the lands to be selected and to contributions towards expenses, and also in reference to the plans of management in conformity with which the lands must be cultivated in succession, and finally in relation to the form of custody.

Article 2. — The committee is made up of the prefect of the province, as president, the inspector of the forestry section, an engineer of the Provincial Civil Engineers' Corps, two members of the provincial deputation and two others chosen outside the deputation, after hearing the view of the agricultural unions of the province.

Article 3. — The direction of the work of re-afforestation is entrusted to the forest inspector, under the supervision of the above named committee

Article 4. — The forest inspector shall submit to the committee the scheme for the work of *re-afforestation* and the plans of management.

The committee shall send these, together with its own opinion, to the Ministry of Agriculture, Industry and Commerce, which shall resolve thereon in accordance with the view of the agrarian council.

At the end of every year the forest inspector shall submit to the Committee a report on the operations carried out, which shall be communicated to the Ministry of Agriculture.

Article 5. — The government will contribute one half of the expenses of *re-afforestation* up to a total of 10,000 liras to be appropriated from the sums at the disposal of the Ministry of Agriculture, Industry and Commerce under the corresponding head of the estimates (forests and sundry expenses).

Additional article. — Power is given to the other local institutions to adhere to the present by-law, giving their aid and causing themselves to be represented on the committee in such way as may be agreed on with the province and with the Ministry of Agriculture, Industry and Commerce.

Identical royal decrees were issued for Aquila, Genoa, Florence and Messina.

Up to this point, however, there were only particular agreements between the State and the interested provinces for promoting re-afforestation through the agency of the forest committees.

These isolated endeavours were followed by the law of the 20th June 1877 establishing the *Re-afforestation Associations* the purpose of which is the re-afforestation of lands under legislative restriction in order to guarantee the solidity of the soil and the proper channel of water-courses.

In the three years 1878-1880 the action of the Re-afforestation Associations brought 2191.78 hect. under forest cultivation at a cost of 116,302.29 liras, being an average of about 53 liras per hectare. The average area re-afforested per year was 730 hectares, which is much higher than that of the entire following period up to 1910, although new associations had then been formed in succession and the premiums doubled.

In furtherance of the same end there followed the law of 1 March 1888, No. 5238, to which was appended a schedule of the mountain lands

most in need of re-afforestation. The following were the particulars given for the whole kingdom :

Re-afforestation area	387,632.00	Hect.
Cost involved	47,914,787.94	L.
Average cost per hectare	123.60	»

This sum would not have been excessive if the re-afforestation work had proceeded on the lines indicated above, and above all if it had been sought to remedy causes and not effects, to re-afforest extensive surfaces, and not to correct the course of the torrents or repair the damage to the banks by fresh enbankment or other expedients.

By circulars of 18 and 29 July 1884 the ministry again insists that re-afforestation should not be fragmentary but affect entire mountainsides.

Even at this early date the work of the Re-afforestation Association did not correspond to the intention of the ministry and the needs of the country. This is proved not only by the above circulars but also by the report with which the minister Grimaldi, on 2 April 1886, submitted the "re-afforestation law" to the Chamber. The report says :

"On the system hitherto pursued, the work of re-afforestation is so split up and scattered as to present very little hope of effective results. The denuded surfaces of our mountains now number hundreds and thousands of hectares, and it would be useless to hope for any benefit from the re-arrangement and improvement of a small area, especially as regards the system of watercourses and catchment areas".

In keeping with this view the ministry held that the work of re-afforestation ought to be carried out on a more extensive basis, subordinating it to a study of the watersheds which it was proposed to protect and consolidate, both from the hydraulic standpoint and that of the prevention of landslides.

It is well known that this Bill did not pass into law.

Other subsequent decrees again emphasised this idea until, for furtherance of re-afforestation and the work of the associations constituted by the forest law of 1877, there was enacted the law of 1 March 1888, No. 5238, containing provisions for encouragement of re-afforestation. In the preamble thereto it is stated that the law may be viewed as a development of the previous enactments concerning Re-afforestation Associations. For various reasons however the new enactments, which were to give so powerful an impetus to forest restoration, remained a dead letter.

Then came the law of 30 March 1893, No. 173, but this again did not prove effective.

Next followed the law of 7 July 1902, amending that of 30 March 1893, and increasing the State subsidy to 50 and even 60 % of the expenses entailed, reducing to 20 % the contribution of the association and charging the rest to the commune and the province.

Even however with this increased subsidy, landowners remained refractory.

*
* *

We will now adduce a few important figures illustrating the total work of the associations in the periods 1867-1887 and 1888-1914.

In the first period, *i. e.* from 1867 to 31 December 1887 almost all the associations carried out genuine re-afforestation work, keeping strictly to the objects of the law, so that though they were few in number (12), they re-afforested in the first twenty years 7,383 hectares, at a total cost of 1,010,709 liras, of which 616,754 liras were spent on afforestation and 393,954 liras on constructive works.

In the second period, *i. e.* from 1888 to 30 June 1914, the associations re-afforested 16,826 hect., at a cost of 10,622,183 liras, of which 7,762,860 liras, were absorbed by constructive works and 4,400,364 by re-afforestations. The constructive works therefore absorbed 54 % of the total.

In the first period 1867-1887 the average cost per hectare re-afforested was 137 liras ; in the second period 261 liras.

With regard to the number of the associations and the State subsidy granted them, we observe that in the financial year 1909-1910 they numbered 25 and enjoyed a total State grant of 290,000 liras;

In	1910-1911	they were	26	with a	State	grant	of	310,500 ;	L.
»	1911-1912	»	26	»	»	»	»	311,160 ;	»
»	1912-1913	»	27	»	»	»	»	326,645 ;	»
»	1913-1914	»	31	»	»	»	»	358,206 .	»

The " Report of the State Forest Domain " brings out clearly the direction taken in the course of time by the associations, showing how little by little they deviated from the legitimate objects for which they had been formed.

Thus instead of intensifying re-afforestation work, they largely extended the construction of dams, weirs and the like, thinking that they could by these works supply to some extent the beneficial effects of forests; they also endeavoured to reduce the declivities of stream beds and bind and hold loose earth.

From the administrative point of view again many of the associations became almost independent of all State supervision and directed the work without any control or approval except that of the local inspector.

In order to remedy these abuses and this wrong direction of the energies of the association, the ministry thought fit to issue, on 12 March 1914, a circular to the forest inspectors indicating a more rational direction for the schemes of new works, and above all giving expression to their just wish that the financial assistance given for the creation of new forests should be expended on re-afforestation Provision is made by especial laws within the competency of the Ministry of Public Works for needs of a different character, such as the construction of dams, dykes and walls for the defence of inhabited parts and the consolidation of landslides, and it is desirable and

indeed necessary that the Re-afforestation Associations should instead give their attention to covering the denuded mountains with trees and consequently contribute with their entire strength to the beneficent work of the restoration of Italian forests.

§ 7. Work of re-afforestation and forest organization in Sardinia, Basilicata, Calabria and other places according to the special legislation on behalf of them.

(*a*) It is well known that special laws were passed in favour of Sardinia, Basilicata, and Calabria. In the three laws in favour of *Sardinia*, afterwards consolidated by royal decree, passed 10 November 1907, No. 884, it was directed as regards re-afforestation and forest work that properties once common land, when bare and devoid of tree vegetation, were to be handed over free of joint ownership or other charge to the local forest inspections for re-afforestation. For many reasons the results in Sardinia cannot be viewed as promising. 537 hectares were re-afforested there at a cost of 860,524 liras.

(*b*) The law of 31 March 1901, No. 140, containing special provision in favour of *Basilicata*, appropriated a fund of 5,400,000 liras divided over 20 years to the re-afforestation of the domanial lands of the State, provincial and communal, whether the latter were originally common or were ex-feudal domains, if they were situate within the zone under local restriction as to deforestation, the re-afforestation to be carried out directly by the forest inspection office and premiums to be granted to private owners for re-afforestation work carried out by them on their own lands. The said law also appropriated 21,600,000 liras to the regulation of mountain and plain catchment areas of the watercourses of the province.

Though the duties of direction and supervision of the Civil Commissary remained intact, the work of afforestation pure and simple was entrusted to the Forest Department, and that of regulation to the Ministry of Public Works with the assistance of the former.

Statistics show that at the end of the financial year 1911-1912 there had been re-afforested by the special forest office of Potenza about 5,558 hect. at a total cost of 873,775 liras. Re-afforestation work on communal lands had been begun in 42 communes on about 70 plots, but owing to many failures, due to various causes, only 1,300 hect. could be considered gained to the forest at the above cost. On 30 June 1914, by repairing and restoration work, 2,808 hect. could be deemed re-afforested at a cost of 1,198,352 liras. With respect to the work done by the Ministry of Public Works, confined to regulation of landslide zones near inhabited localities, the following figures are available : re-afforested area 141 hect., costs for re-afforestation 66,755 liras, for construction 134,259 liras, other expenses 74,691 liras, total 275,705 liras.

(*c*) The law of 25 June 1906, No. 255, in favour of *Calabria*, as far

as relates to re-afforestation, the forest organization and regulation of mountain catchment areas and the consolidation of landslide areas, contains the following provisions :

Article 96 directs that the Ministry of Agriculture shall, at a total cost of 4,250,000 liras, during the period from 1906-1907 to 1925-1926, proceed directly to re-afforest and consolidate the domain lands of the State, provincial and communal, whether the latter were originally common or are ex-feudal domains, situate within the zone under reconstruction, and all the lands of private persons acquired and expropriated for re-afforestation or conversion into mountain pasture.

All the lands, provincial or communal, to be re-afforested by the government, excluding those communal lands which are ex-feudal domains or have been acquired and appropriated for re-afforestation, shall, from the beginning of re-afforestation work, form part of the inalienable domanial forests.

Article 30. in addition to the grants already made by the previous laws, provides 23,600,000 liras for works of construction and regulation in connection with watercourses in uplands and lowlands : 8,800,000 liras for improving and reclaiming land 3,465,000 liras for consolidation of areas where landslides threaten inhabited regions.

The carrying out of the work of regulation of mountain catchment areas and plains for the watercourses of Calabria, including re-afforestation and consolidation of mountain lands, in co-ordination of course with the former, is directly in charge of the State.

By arrangement between the competent office of civil engineering and the forest inspection office, there are laid down the limits of their respective competencies to plan the work for each, mountain catchment area or landslide area to be consolidated.

By the law of 9 July 1908, No. 445, containing provisions for Basilicata and Calabria, other sums are allocated for landslide consolidation to avert danger to inhabited parts.

We may here recapitulate the re-afforestation work done in the three provinces of Calabria during the last few years up to 3 June 1914, both that in the competency of the Forest Department and that executed by the latter for the Ministry of Public Works.

Re-afforested area 73.494 hectares. Total cost 1,224,559 liras divided as follows : cultivations 404,302 liras ; constructions 388,902 liras ; keepers' houses 37,325 liras ; nurseries 80,043 liras ; management, supervision and sundries 313,785 liras.

As regards re-afforestation in conjunction with organization of mountain catchment areas, very important works have been carried out in the watersheds of the Trionto, the Callivo, the Busanto, the Bagni and particularly the Allaro in the province of Catanzaro.

***

Finally, with respect to re-afforestation in conjunction with hydraulic work within the competency of the Ministry of Public Works, we note that in execution of the law of 2 March 1900, No. 195, authorizing re-afforestation and consolidation work on catchment areas and dunes, there were re-afforested on 30 June 1914 in the dune of Feniglia 144 hect., in the watershed of the Sele 651 hect., in the Valle dell'Inferno (Liri) 438 hect.; in execution of the law of 13 April 1911, No. 311, containing provision for damage occasioned by alluvial action landslides and tidal waves, there had been re-afforested in June 1914, 18 hectares of land in the island of Ischia, out of 57 to be re-afforested; finally, under the law of 19 July 1906, No. 390, making provision on behalf of the sufferers by the eruption of Vesuvius, re-afforestation was carried out in that region over 735 hect. up to 30 June 1914.

MISCELLANEOUS INFORMATION RELATING TO AGRICULTURAL ECONOMY IN GENERAL.

CANADA.

PRINCE EDWARD ISLAND PASSES IMPORTANT AGRICULTURAL LEGISLATION. — *The Farmer's Advocate and Home Magazine.* London, Ontario, May 18, 1916.

Thirty-four bills in all received the royal assent during the recent session of the Prince Edward Island Legislature.

The most important act, agriculturally, is the Drainage Act. It is patterned after the Drainage Act of Ontario, and differs only to suit local conditions. Upon a petition from the majority of the landowners of any section, the government may send an engineer to make an examination of the area proposed to be drained, and to prepare a report setting forth the estimated cost of the work, the assessment of the lands to be benefited, and the proportion of the cost to be paid by each person. On the completion of this report, a meeting of all those interested shall be called for the purpose of considering the report, and completing arrangements for the prosecution of the work if it is decided to go on with it. In case anyone feels aggrieved or unfairly dealt with by the report, an appeal may be made to the judge of the County Court.

The government undertakes to lend money to landowners to carry on this work, the loans to be crown debts, and principal and interest to be repaid in equal annual instalments extending over a period of years. To provide the money for this purpose debentures are to be issued, but not more than $5,000 to be issued this year.

The great obstacle to the introduction of drainage in the past has been the cost of the tiles. The freight of them from either Nova Scotia or New Brunswick has been so high, as to make drainage altogether impracticable except in a few special cases. Last autumn a suitable area was chosen for the manufacturing of tiles in the immediate neighbourhood in which the greater part of the underdrainage will probably be done and a company organized and incorporated under the name of the Prince Edward Island Brick and Tile Company Limited. The Capital Stock is $25,000 of which $15,000 has been fully paid up. The powers conferred on this company are those usually conferred on joint stock companies, except that this company can expropriate lands under certain conditions.

There are about 100.000 acres of land in Prince Edward Island that would be the better for drainage, and the Drainage Act and the incorporating of the above mentioned company are regarded as the most important items of legislation of the present session.

The amendments to the Dairymen's Act give the Dairymen's Association more power in dealing with unsanitary conditions at cheese factories and creameries. Under the Act as amended the association can close any factory or creamery, if in the opinion of the dairy instructor everything is not kept in a sanitary condition, or if the methods of manufacturing cheese and butter are unsanitary. The dairy industry in Prince Edward Island is capable of very great expansion, and it is expected that more money will be available from the Dominion Grant for this work this year.

The Act to incorporate the Farmers' Union Co-operative Society Limited, is interesting because of the co-operative movement that has taken such strong hold of the farmers of Prince Edward Island.

With the inception of dairies, the co-operative movement has its beginning. Every cheese factory and creamery in the province, except one, is owned, and all are managed co-operatively. In 1910 the Co-operative Fruit Company was incorporated, four years later the Co-operative Egg and Poultry Association, and the next year the Co-operative Seed Association. In 1913 the first co-operative store was established by the Bedford Farmers' Co-operative Company, Limited, and this year another company has been incorporated as named above, for the purpose of buying co-operatively for its members and handling their farm products.

Prince Edward Island had in the past a land question similar to that of Ireland. It was however settled by the government buying out the landlords, and selling to the actual holders. It appears now, however, that all the landlords were not bought out, although government sold the lands and gave deeds as if they had been. Some time ago, action was entered in the courts by the trustees of the Lady Wood Estate, for the recovery of rents on these lands, and the government was obliged to protect the deeds they had given by settling with the trustees. The amendment gives the government power to issue a debenture to the trustees bearing interest at the rate of four and one half per cent. per annum.

FRANCE.

WOMEN AND FARM LABOUR. — *The Journal of the Board of Agriculture*, London, June 1916.

The Women's Mission, promoted by the Berkshire Committee on "Women and Farm Labour", which proceeded to France in February last to ascertain the part played by French women in agricultural work during the war, has now issued its report. The mission finally consisted of eight persons, viz., Mrs. Boyce of Windlesham, Surrey (wife of a small holder), Miss Chill-

ingworth of Barn Elm Farm, Bradfield, Berks (daughter of a farmer), Mrs. Saint of High Street, Stone, Staffs (daughter of a farmer), Mrs. Sutherland (daughter of a New Zealand farmer), Miss La Mothe, of the Board of Trade, Miss G. Pott, Hon. Treasurer of the Berkshire Committee on "Women and Farm Labour", and Professor Salmon of University College, Reading.

Leaving London on 23 February, the party visited the following villages and towns, most of which were within the military zone : — Chateau Thierry, Etampes, Epernay, Chouilly, Fère Champenoise, Troyes, Estissac, Thuisy, Chernegy, Langres, St. Geosmes, Champigny-les Langres, and Montigny-le-Bretonneux. The number of farms visited was somewhat smaller than originally contemplated, but the deputation were satisfied that those seen were typical of the majority of others in the same neighbourhood, and might fairly be regarded as representative of the agricultural life of the respective districts. In general the farms were small, varying in size from 40 to 120 acres, and were of the type normally worked by the proprietor and his family.

Cows, usually permanently housed owing to the absence of pasture land, were found on all the farms. Sheep were less common, but in some cases a few were found in sheds. Each household made its own butter and cheese as well as sufficient wine or cider for the owner's use. Rabbits were invariably kept for family consumption. Some machinery was seen, but a great deal had been destroyed by the Germans, and there had been no possibility of replacing it.

The report contains a series of illustrated short notes on a selection of the farms visited. The following examples may be taken as being typical : —

At Chouilly the mission visited a small holding consisting of about 50 acres of arable land with an additional 10 acres of vineyard, the latter being situated some distance away from the farm. The owner, Madame Mornian, has one child who attended school. Before the war her husband usually worked both farm and vineyard with the assistance of another man. Since 1914, when both had been mobilized, Mme. Mornian had carried on the work with occasional help in the field. She owned six cows and managed all the milking herself. A few sheep were kept stalled ; also rabbits and fowls. Until the war, Mme. Mornian had never pruned the vines, but since her husband had been away she had undertaken the whole cultivation of the vineyard.

At Chernegy, near Estissac, the farm of Madame Cottell and Madame Veuve-Mère Cottell was visited. M. Cottell had gone to the front, and his wife, her sister and their old mother were carrying on the work of two farms of about 160 acres. The household produced all its own bread, meal, wine and cider, cheese, butter, milk and oil. The corn was ground by a miller at Estissac and sifted at home, the coarser part being used as food for the stock. Cows, pigs, fowls and rabbits were kept.

The following points were generally agreed upon by members of the mission as including the most useful and practical conclusions drawn from their various observations and experiences : —

1. The immediate and unremitting energy displayed by the French women in carrying on all forms of work upon the land from the moment the men were called up to the army. Not only the wives and daughters, but also the mothers of soldiers undertook the continuance of production of food without delay. Many aged women, whose advanced years would naturally have earned for them complete rest, were found taking an active share in the roughest labour.

2. The aptitude and willingness shown by women of all ages in undertaking the heavier forms of farm work. Though most of the French peasant women visited were used to assisting the men in the lighter portions of agricultural operations, many instances were found of women now carrying on work to which they were unaccustomed before the war. One of the most striking of these instances was that of a soldier's wife who had never touched a plough until her husband and brother were mobilized but who, after two days' lessons from the brother, had ploughed and sown some 50 to 70 acres without assistance. This woman was engaged in teaching her daughter of 12 years old to handle the plough and manage two somewhat ill-tempered horses.

3. That French women appear to accept the carrying on of extra agricultural work as their natural and proper share of the hardships of war. They are to-day fulfilling these tasks without murmur, and their attitude in the matter forms a valuable lesson to their English sisters.

4. The far wider resource and greater economy shown by French country women than is generally practised in English villages. More use is made of garden and wild vegetable produce, not only for human food, but also as nourishment for animals. Domestic duties are more generally shared by the whole household than left to one member of the family as is often the case in England.

5. The remarkable productivity of the farms visited as regards the various food commodities consumed by the family, and the consequent self-dependence of the French agricultural household was constantly noticed. Though the English agricultural worker cannot produce his own flour and cheese as does the French peasant propietor, the latter's careful storage of dried beans and peas and use of wild salads might well be imitated in our own villages.

6. The large number of domestic animals reared by French women: every house visited owned a rabbit-hutch and reared rabbits as well as fowls in great quantities. The rabbits were fed almost entirely on wild herbage gathered by the women and children from the roadside, and there would seem to be no adequate reason why so useful and inexpensive a form of animal food should not be more widely cultivated in England. As one Frenchwoman was heard to remark: "If one has rabbits and fowls, one need never lack a Sunday dinner".

7. The extreme simplicity of family life as witnessed in the villages visited. The absence of all display of luxury in furniture and food, and the apparent contentment with which the agriculturists live far removed from town life with its attendant amusements, was often remarked by mem-

bers of the mission. There was good reason to believe that a great many of the families seen were possessed of comfortable sums in the savings banks, but there appeared to be no desire or intention on the part of owners to spend such money on the increase of personal luxury, or to relax the hard work and long hours spent daily throughout their lives in the performance of their household and agricultural duties.

8. The custom in some districts of relieving the working mothers of the care of children of school age by arranging for their superintendence at the school for the entire day during the busiest agricultural seasons was interesting. It appears probable that some such arrangement might be introduced with advantage into English villages during the present emergency.

ITALY.

SPECIAL MEASURES IN RELATION TO AGRICULTURE. — *Gazzetta Ufficiale del Regno d'Italia*, Rome, 31 May 1916.

By recent Lieutenancy Decree some measures of importance for agriculture have been enacted which we summarize in brief :

Agricultural machinery. — In the first place power is granted to the prefects in the kingdom to declare it compulsory on the part of landowners, lease-holders, tenants of estates, farmers and labourers on the soil in their respective provinces, to lend the use of their animals, machinery and implements for harvesting and threshing, to other farms in the province, retaining the right to adequate remuneration, and precedence being taken by the needs of the owners of the machines. The Minister of Agriculture, Industry and Commerce may render the interchange of such facilities obligatory between one province and another.

The mayor shall, in accordance with the available facilities and the needs of the agricultural estates in the territory of the commune and the applications received from adjoining communes, give his decision in respect to the applications for these facilities, specify their conditions, periods and fair remuneration.

In case of refusal or persistent non-fulfilment of such grant of facilities, the mayor is bound to give immediate notice to the prefect of the province, who has the power ex officio to order requisition to be made, at the expense of the party in default.

There is also prolonged the power already granted to the Minister of Agriculture by decree of the 6th June 1915, No. 826, to purchase motors and agricultural machines, to allow farmers the use of them, and, by premiums and contributions, to assist societies or associations who, with their own appliances, undertake the systematic execution of agricultural work in the general interest of a specified territory.

Provincial Commissions of Agriculture. — In each province there is instituted, at the prefecture office, a provincial commission of agriculture consisting of the prefect, as president, a delegate of the military authorities appointed by the commander of the military district, the director of the department of travelling lectures in agriculture, or a delegate for him selected among the technical staff of travelling lecturers of the province, and six experts in agricultural matters, three of whom must be hirers of labour for agricultural work and three agricultural workers, both being selected by the prefect after consulting the principal corresponding associations, if any.

The said commission shall, availing itself likewise of the aid of local employment offices, where they exist :

1) ascertain the available labour for agricultural work in the different parts of the province, and estimate the deficiency or excess relatively to the needs of local cultivation ;

2) promote and organize displacements of labour from one part to the other, as need may require ;

3) ascertain the available resources in the shape of agricultural machinery in the province and promote and facilitate its widest possible utilization ;

4) promote and encourage, among other methods by means of education and propaganda, a larger utilization of family labour ;

5) keep in touch with the commissions of agriculture of adjoining provinces in order to regulate and facilitate the movement of immigration and emigration from province to province, according to available labour and agricultural needs.

If the commission, after having carried out the above measures, shall satisfy itself of the absolute deficiency or excess of labour in a given region of the province, the prefect shall effect immediate notification of this to the Ministry of Agriculture in order that corresponding steps may be taken.

District Arbitration Commissions. — In each judicial district there is instituted an arbitration commission, presided over by the praetor and consisting of four members, appointed by the praetor and selected after consulting with the principal corresponding associations where they exist, two of them from hirers of agricultural labour and two from agricultural labourers.

The commission, when called upon to decide disputes in connection with the extension or cancellation of agricultural contracts, shall conduct its business through the praetor and two commissaries selected by him, one for each category ; it shall on the other hand act in plenary assembly in reference to collective disputes and disagreements.

Any person who, when called upon to become a member of the commission, refuses to undertake the office and does not take part in the sittings, without just cause, in the opinion of the praetor, shall be fined 25 to 50 liras.

In the event of collective disputes relating to agricultural work, the

district arbitration commission shall act for the purpose of conciliation at the request of either or both the parties, and also at the request of the prefect of the province.

Should the conciliation be successful, the corresponding report shall avail as a contract between the parties.

The commission may, by agreement of the parties, decide the said disputes, with the powers vested in friendly adjusters and umpires.

RUGGERI ALFREDO, gerente responsabile.

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Part I: Co-operation and Association

UNITED STATES.

THE ORGANIZATION AND THE WORKING OF BOYS' AND GIRLS' AGRICULTURAL CLUBS IN THE UNITED STATES.

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The boys' and girls' agricultural clubs in the United States have been for several years, as the result of an organization constantly extended, developed and perfected, a means of propaganda which most effectively inculcates the love of agriculture in the rural population, counteracts the attractions of towns, improves the farmers' methods of cultivating the soil and breeding, and at the same time teaches boys and girls — at an age when usually they think only of play — to recognize the economic value of their individual efforts. The efficacy of this form of rural organization is proved by its excellent results, and is such that the Federal Government is convinced of its moral, civic and economic importance, and amplifies its work in every possible way.

§ 1. THE ORGANIZATION OF THE BOYS' CLUBS.

(A). *General Organization.* — The boys' clubs are at present organized by the States Relations Service, which was formed after the passing of the law of 1914 on agricultural propaganda, and by the Bureau of Animal Industry.

The first effort in this direction was made by the Federal Department of Agriculture, some eight years ago in the Southern States and only three years ago in the North. The aim is to give boys and girls some practical knowledge of agriculture and domestic economy, and to let them benefit by the results of the most recent research undertaken by the department which has competence in this sphere. The membership of the clubs has increased rapidly and at the end of 1915 approximated to 250,000. The clubs were at first all corn clubs and their activities were limited to the cultivation of maize ; but now they cultivate maize, potatoes, sugar beetroot, lucerne grass and other forage, raise poultry, grow and preserve vegetables and fruit, and teach domestic industries, domestic and rural economy, and so forth.

As regards the organization of the boys' and girls' clubs the Federal Department collaborates closely with the agricultural colleges of each State by means of their extension departments. Arrangements are made for the nomination of leaders of the club work in the different States, and these are paid partly from Federal funds and partly from those of the State in question. Each leader, seconded by the agricultural county agents, the county superintendents of schools and the teachers, organizes within the State assigned to him the formation of new clubs in places where they seem to have a good chance of success.

He comes into personal contact with the clubs, to which he gives practical explanations of their work, and he secures for them the interest of organizations which may help their development — chambers of commerce, commercial or industrial associations, banks, women's clubs and "granges" (farmers' associations). His duties are so heavy that certain States have granted him one or more assistants. The State and district leaders hold every year a conference at which the general policies and methods to be followed for the ensuing year are determined. In addition to the direct advice of the local leader, the county agent or the State leader and his assistants, the club members receive complete instructions by post from the Federal Department and the agricultural college of their State.

Three types of club prevail : 1) the corn clubs and canning clubs ; 2) the pig clubs ; and 3) the poultry clubs.

1) The organization which has been described suits especially the clubs for growing maize and the girls' clubs for making preserves. The technical authorities of the Federal Department and the agricultural colleges teach the members of corn clubs how best to fertilize their plot of ground, prepare the seed bed, select their seed, plant and cultivate ; and the canning club girls how to cultivate their tenth of an acre of tomatoes or other vegetable and how to preserve what they grow. In the canning season demonstrations are given in as many places as possible by the State leader or his or her assistants. He furnishes all club members with forms on which they report from time to time their method of procedure in growing their crops. At the end of the season a fair, festival or contest is usually held, and prizes are given for the best exhibits or the best essays on the growing of the crop. The boy who has grown the most maize at

the lowest cost becomes the club champion and competes with other club champions for the State championship. Prizes are given by local residents and by the State colleges, and diplomas are granted to the State champions by the Secretary of Agriculture.

2) The organization of the pig clubs is under the direction of the Bureau of Animal Industry, which co-operates with the State college. This work was taken up by the Federal Department in 1912, in co-operation with the State of Louisiana, clubs having already been started in that State under the direction of the State university. The pig club work has been gradually enlarged and extended until there are now pig clubs in 13 States, with a total membership of over 9,000. The Federal Department and the State colleges co-operate under the States Relations Service, a State pig club leader being appointed jointly by the department and the extension division of the State college. The State leader sends out complete information on the organization of clubs, and also forms for reporting on the work. In each county or community there is a local leader who directly supervises the work of the members. The Department of Agriculture, through the State leader, furnishes instructions on slaughtering and on curing the meat to the members of these clubs. Each member must secure at least one pig to feed during the season. The boys are encouraged to get pure-bred sows, if possible, and raise litters of pigs; or they raise their pigs for meat and become members of the ham and bacon clubs.

3) The Bureau of Animal Industry, in co-operation with the State colleges, also has charge of the boys' and girls' poultry club work in the Southern States. In each of the six States which co-operate with the department in this work there is a State poultry club leader who directs the organization of poultry clubs. He travels throughout the State explaining, both to the members and to their parents, the proper methods of raising poultry. Personal supervision is given by a local leader who is usually the local school teacher. The object of this type of organization is the improvement of farm poultry and the placing of the industry on a more profitable basis. The importance of purely bred poultry is emphasized. Each member is required to obtain at least one sitting of purely bred eggs, and then to feed and care for his birds according to instructions furnished by the department. A great increase of interest in raising poultry has been noticed in the States where this work has been conducted. The establishment of community poultry-breeding associations is encouraged and has been undertaken by the older people in some instances as a result of the initial steps taken by the boys and girls.

The success of the boys' corn clubs and pig clubs in the South has led those in charge of the work to plan for the extension of the movement through the formation of boys' farm clubs. In these clubs the boys who have already learnt how to produce large yields of maize and how to feed pigs, in the earlier associations, are taught the elementary principles of crop rotation, of the economical feeding of live stock, and of soil building.

§ 2. The working of the pig clubs.

The first boys' pig club was organized in Caddo parish, Louisiana, in the autumn of 1910, by the superintendent of the rural schools of the county. Its work grew out of that of the corn club, since the maize served to feed the pigs ; and, also with a view to their nourishment, it encouraged the boys to vary their crops. Two years later the organization passed under the direction of the Bureau of Animal Industry.

The objects of the pig club work are to teach the boys improved methods of raising and fattening hogs, the value of forage crops and of sanitation, good management in handling swine, methods for home-curing of meats, and, generally, a broader and better view of farm life, thus making them better future citizens.

a) *Financial Resources.* — If a boy has money with which be can buy a pig it is always advisable that he should thus secure it. There are many worthy boys however who cannot get money to buy a pig, but can grow most of its feed and earn enough to purchase the rest. To aid such deserving boys several plans have been tried. At first some bankers thought it would be well to give pigs to some boys, but this is undesirable for several reasons : it is not good business policy ; the given pig would not be as well appreciated or as well cared for as if it bad been bought ; many boys would hesitate about buying a pig, thinking one might be given to them if they waited. This plan has been discouraged and others sought.

In a number of counties in various States banks, business firms, chambers of commerce or individuals have set aside sums of money which can be lent to reliable pig club members, who are first approved by the county agent or other responsible person and who agree to follow all instructions of the pig club agent, who give a note for the pig payable at some future time at a low rate of interest, and who agree to submit a final report of the year's work to the lender of the money, as well as to the club agent. Many thousand dollars, set aside for this purpose, are being used most beneficially. On the note given by the boy there is usually a statement signed by the parent to the effect that the latter consents to the arrangement and will not claim any proceeds from the sale of the pig or its progeny. The matter is then handled in a purely business way, giving the boy a lesson in business transactions. Few banks require the parents to sign the note and thus become responsible for the boy's debt: the boy is put upon his honour, and very seldom indeed does he betray the trust placed in him.

The best plan that has been tried is that of the "endless chain", whereby the money available to lend to pig club members is used to buy a number of good young registered sows from reliable breeders. These young sows are lent to boys recommended by the county agent or a special committee for this purpose, with the distinct understanding that they are to be brought up according to the instructions of the pig club agent or the county agent, and are to be bred to a registered boar of the same breed. When

the litter is weaned two choice young sows are returned to the man who furnished the mother-sow, which, together with the remainder of the litter, becomes the property of the pig club boy. The two young sows are in turn lent to two other club boys, and in this way the number of pigs is constantly increasing.

A form of agreement is used for making the contracts with the boys. If a boy fail to fulfil any part of his contract the hog reverts to the original owner. The risk is sometimes borne entirely by the person furnishing the pig, while in other cases the contract states that if the sow die another shall be furnished to the boy, and he shall be required to return either three or four young sows from the first litter secured.

There are many advantages in this method of financing pig club boys. A club can be started without a great outlay of cash and it will grow automatically. A member does not have to borrow money to begin with, which is sometimes objectionable to parents. If the pig of a boy who has borrowed die he must obtain money to pay his note, whereas by the chain method a boy can have a second trial. Community breeding can always be started in this manner, only one breed of pigs being furnished to the boys. An extra good boar is often provided, to which the young sows can be bred at a reasonable fee, as is seldom the case where community breeding is not conducted.

Many breeders have taken advantage of this plan of providing breeding stock for club members, as it is usually a profitable transaction for them and at the same time helps them in a business way. One chamber of commerce in Georgia has set aside money for the purchase of 50 young sows, and this number will increase automatically until good hogs will be found throughout the entire county. The plan is also being successfully carried out in Georgia, Alabama, Arkansas, Oklahoma and Indiana.

b) *Results.* — Up to 1 July 1915 the pig club work was being conducted in Louisiana, Alabama, Georgia, North Carolina, Kentucky, Indiana and Nebraska. During the autumn of 1915 it was taken up in Texas, Arkansas, Oklahoma, Massachusetts, California and Oregon. The work will be extended to other States as fast as funds permit. During 1915 there were over 10,000 club members in the States named, of whom 5,827 were in Louisiana, Alabama and Georgia.

Some trouble has been experienced in getting the members to keep records throughout the year: the percentage of their whole number who send in complete reports is smaller than it should be. The report of 1914 of the members in Alabama showed that the average number of pigs per member in the spring was 1.35 and the average weight 34 pounds. In the autumn the average number of pigs per member was 1.92 and the average weight 126 pounds. The average daily gain per pig was 0.72 pound, made at a cost of $5.20 per 100 pounds.

In Louisiana, Alabama and Georgia the average valuation of all members' pigs in the spring was $9.01, $5.50 and $11.26, respectively, while the average valuation in December was $22.26, $17.14 and $43.60. The low valuations of the hogs in Alabama was due to the facts that about

80 per cent. of them were meat hogs, and that there were 21 litters of pigs included in the December valuation, which lowered the average. The valuation in December of the original pigs acquired in the spring, together with their increase, was $27.28 per head. The high prices in Georgia were due to the fact that almost all of the pigs were registered. The average valuation of the Louisiana club members' hogs was $22.26, while the average valuation of the hogs of the State was $7.70.

By means of the organization already explained the pig clubs have made possible in many counties that one breed of hogs should be adopted as the standard and raised almost exclusively. In Falkner County (Arkansas) where the purchase of pigs was financed by banks for 75 boys, 97 % of them had registered hogs of one breed, while in Sebastian County (Arkansas) 90 per cent of the 91 boys had registered hogs of another breed.

Thanks to such specialization the club members can obtain breeding stock at home for less money, can secure better breeding stock because they have a greater number from which to select, and can sell many more hogs for breeding purposes, as each of the specializing counties is becoming recognized as a breeding centre for a certain breed of hog, and with such reputation there come increased orders for breeding stock. This is one of the great achievements of the pig-club work, and in this matter a success is being made by the boys where their fathers have failed.

The pig club exhibits at the county and State fairs have been very valuable to the members, as a means both of education and of profit.

Shortly before fair time the members are taught how best to feed their pigs during the last few weeks before they are shown, how to enter them for the fair, how to trim their toes and ears, and scrub, brush and oil them in preparation for the ring, and how to handle them in the show ring. The members get experience at the county fairs and as a result usually have a very high class exhibit at the State fairs.

In 1914 there were 185 hogs exhibited by pig club members at the Louisiana State fair. They were judged and prizes were awarded to them in the boys' pig club classes, and those boys who conformed to the rules of the fair association were permitted to show their pigs in the open classes with the breeders' hogs from various States. Several prizes were won by the boys in such competition. After the fair some of the breeders asked the fair association to bar the boys from showing their pigs in the open classes during the following year — a request immediately declined by the association. The fact that it was made was one of the greatest compliments that could be paid to pig club work.

At the Louisiana State fair in 1915 club members showed 205 pigs — practically all of them registered hogs in prime condition. One member, who showed a Duroc sow and her litter of nine pigs, won in the pig club classes six prizes of the total value of $119. In the open class, against the breeders from various States, he won the second prize of $3 with the Duroc sow, thus raising the total value of his prizes to $122. He was offered $400 for the sow and litter but refused this sum, and afterwards he sold out of the litter three boars and one sow for $260.

He values the old sow and the five sows of the litter at $600. He submits the following statement as to his year's work:

		$
Value of sow and litter 1 May 1915		200.00
Food consumed to 1 Nov. (maize, shorts, oats and milk).		100.00
Clover pasture		7.50
Labour		27.38
Total		334.88
Prizes won at fair	122.00	
Sale of 4 pigs	260.00	
Value of old sow and five sows of litter (retained)	600.00	
		982.00
Net profit on work		647.12

It is possible that the boy has over valued the young sows which he retains, but if they were worth only half the price he names his record would still be phenomenal. Such a record is rare, it is true, and perhaps does not illustrate the real value of the pig club work; but it gives an example of what can be accomplished. The success actually attained is more nearly measured if we state that each year at the State fairs many pigs raised by club members change owners at prices varying from $30 to $75 a head.

But, as has been indicated, the effect of the work of pig clubs is not solely material, but is otherwise widely important. A county school superintendent of Texas writes as follows:

"From four years' records I find that the pupils belonging to the various clubs have made an average grade in all subjects, except spelling and composition, of 11 % more than the children not doing club work. The club members made a general average of 16 % more on spelling and 23 % more on composition than the other boys and girls.

"The club pupils have been active and inspired to do better work... Very few club boys and girls in the rural schools of this county stop school, and when they do so it is not of their own choice...

"Among the club children there is better attendance at Sunday school by 7 % and at church services by 5 % than among the other children...".

The work of the pig club has interested in study many a boy who either disliked school work or was a laggard in his classes. Its educational value to the parents is equally significant. Many parents, who had permitted their children to join a club only reluctantly, have finally admit-

ted having derived as much good from the work as those children. Many parents have absolutely changed their methods of handling hogs since they have seen the results obtained by their sons.

c) *Ham and Bacon Club.* — The second principal section of pig club work — to which as yet we have made little reference — concerns the fattening of the animals for home consumption or sale to the butchers. In Georgia this aspect of the work is prominent: the members are taught to slaughter and to cure meat at home. The indirect effect of this work on the farmers is such that many of them now slaughter and cure their meat according to the instructions furnished to the club members. Several of them have been induced to build a simple and cheap meat-curing house according to plans furnished by the department, and to keep a record of the meat cured. Such a house costs about $100 and can be used for curing 20,000 pounds of meat or more at a very small cost and without any loss, if instructions be followed. The greatest drawback to producing meat for home consumption in the extreme south is the difficulty of getting the slaughtered carcasses thoroughly cooled, and the heavy losses often resulting from a sudden rise in the temperature. In 11 counties in Georgia, where systematic pig club work was conducted, and the home curing of meats especially urged upon the farmers, 11,000,000 pounds of meat were cured during the winter of 1914-15 in excellent conditions.

§ 3. The poultry clubs.

The girls and boy's poultry club work was originally started in Virginia in November 1912, by the co-operation of the United States Department of Agriculture with the Virginia Agricultural and Mechanical College and Polytechnic Institute. During the first year the work, necessarily experimental, was developed in districts where conditions seemed suitable to it. The results were so satisfactory that the work has been continued on similar lines in Virginia, and extended to the States of North and South Carolina, Georgia, Kentucky and Tennessee.

A poultry club agent, appointed for each State and working through the canning club demonstrators, the county agents and the school teachers, first visits the schools in which clubs are to be organized. Each child expressing a desire to join is enrolled as a member and supplied with a set of the Poultry Bulletins of the United States Department of Agriculture, and also with five report forms upon which he is instructed to keep a detailed account of his poultry work. These reports if properly kept, give when, at the end of the season, they are sent to the county or State agents, a complete record of the achievements of members as well as a guide for the following year.

It is only fair to recognize that the development of these organizations is due above all to the rural school teachers, who are the best assist

ants of the Federal Department and the State. The work of propaganda is conducted chiefly by their means. The club agents give lectures to prospective teachers — to the rural teachers' classes at the normal schools, and to the students of the county and agricultural high schools.

All club members are encouraged to raise and keep purely bred stocks. In this matter poultry breeders have co-operated, in that they have furnished sittings of eggs at prices within the reach of members. In some counties both club members and their parents have been induced to specialize in a single breed or variety of fowl, a plan which has hitherto proved popular and practicable.

The members of the poultry clubs have shown their products at many of the local and State fairs, and have sometimes won prizes in competition with professional breeders.

An idea of the growth of poultry club work may be obtained from the following comparative figures for the first year (1913) and part of the year 1915. The growth has been however even more rapid than appears, for the figures for 1915 are not complete.

Poultry Club Work in 1913 *and* 1915.

	1913	1915	Increase per cent.
No. of States organized	1	6	500
" " counties "	4	98	2,350
" " clubs "	11	326	2,863
" " members	150	3,722	2,381
" " eggs set	2,378	11,860	398
" " " hatched	1,696	8,595	406
" " chickens raised	1,201	6,402	433
" " shows held	3	42	1,300
" " fowls shown	132	3,048	2,209
" " dozen eggs shown	0	155	—
" " members exhibiting	50	931	1,762
Total value of awards	$218.50	$1,177.74	434

The reports furnished by the poultry club agents give some interesting details as to the results obtained by members.

A girl in Nottoway, Virginia, after two years' work sold $87 worth of eggs and fowls. The money she thus earned played an important part in allowing her to attend the county agricultural high school.

Two brothers, both poultry club members, are now breeders of purely bred poultry. They have been successful in their venture and advertise their stock in local and in State papers. Last year the younger brother sold about $80 worth of market poultry and eggs, while the elder sold a large number of breeding fowls and eggs for hatching. As a result of the

club work both have been able to attend winter short courses at their State college.

Two sisters, encouraged by their mother, succeeded in their first year of work in building up two poultry flocks worth together $200, and in making on them enough money to secure poultry equipment worth $175. These girls hope thus to pay their way through the normal school.

Needless to say, the farmers of districts possessing poultry clubs gradually adopt the methods which the club agents have taught their children.

§ 4. Methods of sale by the canning clubs.

The girls' clubs for preserving fruit and vegetables in North Carolina are striking examples of clubs adapted to commercial needs. The gradual improvement of their organization shows how the difficulties which meet these clubs, when they seek to dispose of their produce, can be overcome. Thanks to the individual initiative of the members, to the scrupulosity with which rules for preserving have been applied — rules which are the subject of practical lessons by the superintendents —, and finally to the support given by the agricultural agents, the canning clubs have won recognition and appreciation for this branch of rural industry, and have made at the same time considerable profits.

In 1912 the clubs produced only 70,000 boxes : in 1915 this figure had risen to 633,000.

The canning clubs first sought to sell their preserves wholesale, and to this end sent sample cases of tomatoes to large grocery establishments in New York. The dealers appreciated the quality of the goods, but did not close with the offer of the clubs because the products were not sufficiently uniform. In the following year the clubs profited by this lesson. For the first year the stock of preserves was sold locally in the villages, as well as might be, under the direction of the superintendents, but at the same time the rules for jam-making and preserving vegetables were rendered yet more strict. It was laid down that every box which did not give satisfaction to the purchaser would be changed by the member responsible for it or the price paid for it returned, and that every member convicted of flagrantly breaking the rules would be deprived of her right to use the club's ticket.

After a very short lapse of time the girls of all ages understood the commercial side of their work. The desired uniformity was attained rapidly and personal initiative did the rest.

The following is the simplest method of sale and that which was first adopted. As soon as the preserves were made the members placed a certain quantity of them on barrows and, having already advertised their intention in the local newspapers, hawked their wares themselves in the towns and villages of a certain district. If they ran short of stock orders were taken by the county agricultural agent, who handed them on to the different clubs to be executed, and who was periodically informed of the

progress of business. Sometimes recourse was had to a yet more primitive device: on the highroad placards at the entrances to farms gave a list of the preserves which were for sale, in order to tempt passers-by. Sometimes again an attempt was made to secure the custom of a neighbouring factory. But in a market thus secured there was always an accidental element, and as the organization developed and production increased it was sought to sell the preserves on a more solid and a purely commercial basis.

The first step to take was obvious — to sell to dealers of the district in which the club was situated. The women of the neighbourhood who had tasted the canning club's preserves could and did recommend them to the grocer. In several counties the disposal of products has been thus arranged. The county agent or instructress visits the local grocers once a week or once a fortnight, collects orders and arranges for their execution. The result has been a localization of provisioning. Knowing they can sell their preserves to the local shops the farmers have, in return, ceased to order their groceries from enormous establishments in the Northern States, and get their supplies from neighbouring grocers. This is why the notices which adorn shop windows, above jars of various jams and of French beans and tomatoes, can truthfully anounce that mutual agreement expressed by the phrase: " We buy in the country and the country buys from us ".

Such procedure is not however universal. In certain districts the agricultural agents prefer the method of organizing in the town a special sale day, called *Buy-a-can-day*. This day is much advertised beforehand in the local press and by means of large sheets of linen, inscribed with enormous letters and stretched across the streets. On the appointed date the county instructress, helped by two instructresses of neighbouring counties and several canning club girls, all wearing white caps and aprons, demonstrates to the public methods of utilizing the preserves, and the housewives are invited to taste them. Orders then flow in. By means of this publicity the clubs, by the medium of the county agents, have secured the custom of colleges and other institutions and of large hotels. Thus the desired large market has been found. The fact is due as much to the excellent quality of the preserves — tomatoes, French beans, pickles, jams and jellies — as to the skill and perseverance exercised in bringing them before the public.

This second stage in the development of methods of sale, successful as it is, would not meet all the demands of an incessantly increasing production and a growing market. It is therefore planned to organize canning club members into selling associations. These will be of three grades: the single club, the union of all the clubs of a county, and finally that of all the clubs of a State. It is a principle that sales should not be effected outside the territory of the vendor's State.

In local clubs the selling association would be formed by all the members, from among whom the club superintendent or the county agent would choose an executive committee of five, to include the president. These

girls would be chosen for commercial skill and aptitude, and would be responsible for securing the sale of all the products of the club. The committee would have to compile a list of all the preserves made, see that they conformed to the appointed standard, and dispose of them. Thus uniformity in method of sale would be secured. The local clubs would realize that it is unprofitable to sell at the same time to dealers and to the public directly, and they would choose one or other type of custom. The committees would meet frequently, and would, when necessary, organize selling campaigns.

It is permissible to hope that this organization will enable the clubs to sell their total products locally. If however their production exceed the local demand the executive committee can call upon the county organization. The latter will include the presidents of all the local county committees, and will meet at least once a month during the selling season. From it the county agent will choose the executive committee of the county selling association, which shall be responsible for selling the excess products of local clubs, seeking markets within the county, and maintaining the equilibrium of demand and supply.

If this second committee also find that, in spite of all its efforts, it is left with a stock of unsold products, it can appeal to the central selling association of the State, which will be constituted by the presidents of county associations, from whose number the chief instructor in domestic economy will choose a third committee, charged to sell all the excess products of the clubs. Because local sales are most profitable, since they entail no expenditure on packing or carriage, the clubs should appeal to a county association, and the latter should call upon the central association only in case of necessity. To cover expenses a commission of 2 ½ per cent. on every dozen boxes is deducted from the price of all preserves sold by the central organization.

The selling associations are already at work, and their promoters claim that they will regularize the sale of preserves made by the canning clubs, who through them will obtain good profits proportionate to the fruit and vegetables used.

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In all these boys' and girls' clubs which we have briefly examined there is apparent an effort on the part of the government and of agricultural, administrative and educational agencies to increase the capacity and the resources of the rural populations. Of these the youngest members are, thanks to an organization which year by year extends and improves, better prepared than their elders for agricultural life, and they acquire early a taste for economic independence. The constant calls on initiative develop the individual energy of the boys and girls, who in their corn clubs, their pig clubs, their poultry and their canning clubs acquire a sense of social responsibility, a knowledge of business, and a practical experience in certain agricultural and domestic industries which are and will be of the greatest use to them. Independently of material gain which can be computed in dollars, there is a most important and most interesting social gain.

SPANISH PROTECTORATE OF MOROCCO.

AGRICULTURAL PARTNERSHIP OF EUROPEANS AND NATIVES.

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Since the current of European colonization has begun to be directed towards North Africa numerous and complex problems have arisen, especially, in the Sherifian empire, with regard to the agricultural industry of the European population, on which largely depends improvement in the value of the land.

The extreme difficulty with which hitherto Europeans have become landowners in this country has obliged them to come to an agreement with the natives whenever they have wished to devote themselves to agriculture. They have been obliged to share with the natives, according to a fixed proportion, the products of their farming, and make advances to them ; and thus real agricultural partnerships have been formed.

It is singularly interesting to examine, even briefly, the forms which these economic and social relations between natives and Europeans in Morocco have assumed.

§ 1. AGRICULTURAL PARTNERSHIP AND PROTECTION.

On an earlier occasion we examined the forms of agricultural association which obtain among the Mussulmans of Maghreb (Morocco, Algeria, Tunisia) (1). For our present purpose we will shortly describe only the

(1) *Bulletin of the Bureau of Economic and Social Intelligence.* 3rd year, No. 6, June 1912, p. 29.

principal types of agricultural partnership which unite Europeans and natives.

From the time when, in virtue of the treaties which Morocco had made with the Powers of Europe, foreigners first came into touch with this country, they were met by an impossibility of creating interests in it or developing those which they already possessed, the atmosphere being on the whole hostile. Therefore in order to practise industry and trade they were obliged to make use of such local intermediary agents as they could find. These native agents were however at this time in ill odour with their compatriots and with the local authorities, a circumstance which might prejudice any interests of which they had charge. Thence arose the necessity for foreign Powers to adopt measures which would allow them to defend and protect the interests of their dependents in Morocco, a necessity which caused the system by which employees and labourers in the service of foreigners enjoy " protection " (1). This privilege exempts them, wholly or partially, from the jurisdictory spheres to which they normally belong, and allows them to participate, in the degree of such exemption, in the extra-territorial advantages which are sanctioned by the capitulations.

In Morocco there are now two classes of the protected : the renters (*semsar*) and the members of agricultural partnerships (*mokhalet*). The former enjoy effective and unlimited protection and have the benefit of all privileges granted to Europeans : they cannot be judged by the consular tribunals and they pay no taxes.

The partners in agricultural enterprise, who are our present concern, are protected only proportionately to the interests which have been entrusted to them, and must pay taxes on the property they hold in their own right. If however such property be mingled with that of Europeans, and if they be registered by an influential legation, the general rule is one of tolerance in the matter of detail.

We will now examine the most common forms of the partnership of Europeans and natives in Morocco, those namely which have reference to the tilling of the soil and the rearing of cattle and sheep.

§ 2. Partnership of tillers of the soil.

Partnerhips of this class are various but can be divided, theoretically, into several species of which the chief are :

a) *Métayage partnership* (*be-nous*). — The European gives the landowner his seeds, his draught animals and his agricultural implements. Half the sum of the taxes and the costs of labour is paid by either partner, and the harvest is likewise divided into two equal shares.

(1) France first adopted the system of " protection ", regulated in agreement with the Sherifian authorities by rules established in 1860.

b) *Partnership of two fifths.* — The European does not provide seeds nor contribute to the costs of labour. He supplies only the draught animals and the implements and tools. In return he receives two fifths of the harvest.

c) *Bel-Khobza (for bread) partnership.* — The European provides the seeds, the draught animals and the implements and tools and pays all the costs of labour. The landowner has right only to a fifth of the corn harvest and a quarter of the rye harvest, that is to the quantity necessary for making bread (*khobza*). The European partner has the other fractions for his share.

In practise the following is the usual procedure. The European gives the native a sum sufficient for the acquisition of a pair of oxen, a plough and necessary seeds. Mr. Bayo says that by this system from five to six hectares can be brought under cultivation for 750 or 1,000 pesetas.

In a partnership of this type the European has the right to four fifths of the harvest ; but, since it is almost impossible so to superintend the native that all fraud is stopped or prevented, the latter in practice renders what he chooses. Therefore in most contracts it is customary to determine a quantity which shall he due from him whatever be his harvest. It is thus agreed that the native will give a fixed quantity of corn, barley and beans to the European. In this way the small capital of from 750 to 1,000 pesetas, which we have mentioned, usually brings to the European supplying it 250, 300 or even 400 pesetas a year, that is interest at the rate of from 33 to 40 per cent., the only risk being that of the death of the draught animals.

§ 3. Partnership for raising cattle.

These partnerships most commonly take the following form : the European buys young calves for 25 or 30 pesetas and entrusts them to a native, who takes charge of them for a fixed period at the end of which they are resold. When the sale has been accomplished the sum originally paid by the European is deducted from the price and given back to him ; the profits are then divided among the partners in equal shares, or so that the native receives a third or a quarter share, generally in addition to the milk.

A contract of this type may be rescinded in the following cases :

1) if it be proved that the native partner has not taken sufficient care of the live stock ;

2) if either partner die ;

3) if the native partner employ on agricultural labour animals entrusted to him to be fattened ;

4) in case of an epidemic of cattle disease.

If a theft or a raid take place the native may be discharged of his responsibility if he prove by the depositions of twelve witnesses that such misfortune cannot be imputed to any negligence on his part. In this case the European ought to make a claim on the government of the Sultan.

In partnerships of this form the danger for the European is that of a fraud regarding mortality among the animals. Such fraud can be prevented only by the method adopted, that of obliging the native by contract to inform the European of cases of loss or sickness, in order that the genuineness of the accident may be subjected to proof. Since it is prudent to entrust only a very limited number of animals to the care of one native, it is necessary, if any important enterprise in this branch and of industry be contemplated, to distribute the live stock over a large extent of territory, for it is impossible to find near together several persons offering sufficient guarantees. Consequently, since frequently a journey of from 60 to 80 kilometres would be necessary in order personally to verify the death of an animal, personal superintendence becomes almost impossible. Therefore the European who wishes to develop his raising of live stock even a little is compelled to employ superintendents or inspectors in order to discover the care given to the animals, the sicknesses which may attack them and the depreciation in value which they may undergo.

In spite of these difficulties this type of partnership for raising cattle is considered to be the most renumerative which can be found : according to data which we borrow from Mr. Bayo's work its profits can reach 30 or 40 per cent.

In the opinion of the oldest colonists of Morocco cattle raising is one of the most lucrative businesses in the country (1). It has however still the drawback that the difficulty of superintendence, which has been explained, does not allow speculation with a very large number of heads of cattle nor the employment of large sums of capital.

§ 4. Partnership for sheep rearing.

Partnerships of this type are based on contracts which take principally two forms : contracts for sale in equal shares and contracts by the job.

a) *Contracts for sale in equal shares.* — In partnerships of this kind the European sells the live stock to the native, charging more than their actual price, generally double its amount. The price he charges is payable in four on five years out of the profits which the native derives from the partnership. The European gives the native fixed payment for keeping and feeding the animals ; the total profit they yield and the attendant costs are divided into two ; and at the expiry of the period of the contract the two partners share in equal halves the live stock then in existence. At first sight it looks as though this contract gave a lion's share to the European, since he, having advanced the funds, as we have said, sells the live stock to his partner at twice its value, and has further the right to half the yield of the animals he has granted, except their milk, and at the termination of

(1) In the last twenty years the value of live stock in Morocco has quadrupled, as appears from the fact that meat for consumption was previously worth 0.30 pesetas a livre and its price is now 1.25 pesetas a livre. The livre is equal to 800 grammes.

the contract to actual live stock, although he has twice recovered the price he paid for the whole herd. But in spite of the preference which the European thus enjoys apparently, this system rarely has good results : the natives substitute inferior sheep for those entrusted to them, they conceal births, cause the death of lambs in order that they may appropriate milk, and practise many other frauds habitual to them. It even happens that they become insolvent and cannot pay the agreed price for the live stock entrusted to them.

b) *Contracts by the job.* — The following is the most usual form of contracts of this type : if the European entrust to the native one hundred sheep he receives in every case a hundred fleeces a year. The native partner is not paid for feeding or keeping the live stock and mortality and births among them are not taken into account. When the contract terminates the European has the right to a number of animals equal to that which he first entrusted.

Under this system the danger is that the native partner may make up the tale of a hundred fleeces which he has to deliver from 70 or 80 or even fewer sheep — a common practice. To prevent the possibility of this fraud it is usual to agree beforehand as to the weight the fleeces must have after they have been washed : if they are weighed in any other state the natives deliver fleeces containing much sand or earth, in order to increase their weight and diminish the quantity of wool rendered.

In practice it has been found best not to entrust more than 200 sheep to a single native. If a European wish to sink considerable capital in business of this sort he can divide his herd into several small groups and arrange for the superintendence of these.

In spite of the difficulties which have been mentioned competent persons have estimated that sheep rearing can yield a profit of 25 per cent. on the capital employed on it.

There are other partnerships in Morocco, as some for raising goats, camels and sheep; but these have little interest for Europeans, for they yield only small profits and the superintendence which ought to accompany them is very difficult to exercise.

NEW ZEALAND.

THE CO-OPERATIVE MOVEMENT IN NEW ZEALAND AGRICULTURE

by EDWIN HALL.

INTRODUCTION.

New Zealand is essentially an agricultural country, and there is every reason to believe that it must long remain so. It possesses many advantages for the raising of stock, much of the land is very fertile and is well watered. Extending as it does for over a thousand miles, from north to south, between the 34° and 48° south latitude, the country has a great variety of temperate climates, and a fairly even and well distributed rainfall, making it possible to raise almost any kind of agricultural produce and fruits that can be grown in the temperate zones.

In the south island heavy crops of wheat, oats, barley etc, are grown. In the northern parts of the dominion excellent semi-tropical crops and fruits can be produced, while in both islands there are large areas that are most eminently adapted for dairy farming and raising stock. As the cattle can live in the field for the whole of the year practically no housing and little artificial feeding are necessary.

The total population in 1911 was 1,008,468 and had risen to 1,095,994 by the end of 1914, the whole of the people being practically dependent on agriculture. Out of 454,117 breadwinners more than 110,000 were engaged in agricultural and pastoral pursuits. The other primary producers and miners numbered 20,556 and a large proportion of the rest of the people were engaged in working up and handling the primary products. Excluding gold and specie, the primary products constitute about 98 ½ per cent. of the exports.

The success of agriculture in New Zealand is almost entirely due to refrigeration and co-operation.

The development of co-operation, however, is of comparatively recent date. For many years after the foundation of the colony, the farmers were almost entirely dependent on the local market and the exports were small.

In 1869 the value of the exports (apart from gold) only amounted to £1,727,139. The chief items were :

	£
Flax (Phormium)	45,245
Grain	96,441
Wool	1,371,230
Tallow	13,935
Kauri Gum	111,307
Timber	22,378
Other Produce (including Butter and Cheese)	66,603
	1,727,139
Gold	2,362,995
Total	£4,090,134

At that time (1869) the settlers could dispose of their stock, outside the colony, only in the form of tinned meat, tallow, wool and hides. Not a pound of frozen meat had been landed in England, though Mr. James Harrison had been successful in manufacturing ice, and Mr. Thomas Sutcliffe Mort, of Sydney, had started the first freezing works in the world in New South Wales, and was attempting (with the aid of the French engineer, M. Nicolle) to freeze meat for export. After spending £80,000 on experiments, he died in 1878 without achieving success. His death was hastened by the failure of a trial shipment by the sailing ship " Northam ". A year later a cargo of frozen meat, shipped from Australia in the " Strathleven ", was landed in London in a perfectly sound state, frozen quite hard, and covered with an artificial rime. This revolutionized not only agriculture in New Zealand, but also the meat trade of the whole world.

In 1881 agriculture (the staple industry of the country) was in a critical position. The supply of meat exceeded the local demand. The flocks had increased from 233,000 sheep in 1851 to 12,985,085. The market was glutted and sheep were being boiled down for their tallow. As the profit from boiling down was small, the settler's returns depended mainly on the wool, and the increase in his stock. The price of wool at that time was low, and a succession of bad harvests had intensified the general depression.

The first attempt to send frozen meat from New Zealand was made by Messrs. W. S. Davidson and Thomas Brydone, the managers of the New Zealand and Australian Land Company, who shipped 3521 sheep, 450 lambs and 22 pigs by the sailing ship " Dunedin " in February 1882. This meat was frozen on board and was successfully landed in London in good condition, after a passage of 98 days. The whole shipment was sold in a few days at 6*d* to 7*d*

per lb., which gave a net return to the farmers in New Zealand of about 3½*d* per lb. The first refrigerating company formed in New Zealand erected works at Burnside near Dunedin in 1881. The second, the Canterbury Frozen Meat and Dairy Co., was started on November 11th 1881, with a capital of £20,000. These works could only deal with about 300 sheep a day, but fears were expressed that exporting that number would soon deplete the flocks of Canterbury. But Mr. Thomas Brydone, who superintended the shipping of the first cargo, predicted that the day was not far distant when New Zealand would be able to export 4,000,000 carcases per annum. Over 80,000,000 sheep and lambs have been sent away from the dominion since then. New Zealand now ranks second only to the Argentine among the 14 countries producing the world's meat supply. The Canterbury works alone can now freeze 150,000 sheep per week and there are 33 freezing works operating in various parts of the dominion with a storage capacity for over 3,000,000 carcases, while seven more are being erected. The number of sheep and lambs slaughtered during the year ending 31 March 1915 was 8,471,321 besides 347,353 cattle and 241,683 pigs. In 1881 there were only 12,985,085 sheep in the country. These had increased to 24,901,421 by 30 April 1915. The annual value of the New Zealand exports of animal produce (without reckoning butter and cheese) is now £14,550,000. As the business grew, more attention was paid to working up the by-products. Besides provision of cold storage for butter, cheese, fruit, poultry and other perishable goods, there are now, in connection with most of the freezing works, such industries as meat canning, fell-mongering, wool classing, tallow and oleo-refining and factories turning out manures, glue, gelatine, sausage skins and fiddle strings, oil and pelts etc.

All recent discoveries and modern knowledge are brought to bear to eliminate waste, to make the most of all by-products, rapidly to remove all animal matter and to ensure the most perfect sanitary conditions.

In this way, the cost of freezing and shipping has been so reduced that the consolidated charges etc., were prior to the war under 2*d* per lb. or little more than half that of some of the early shipments.

The farmers have gradually adopted a system of selling their stock on the farm to the buyers of large companies instead of shipping it at their own risk; and as special attention is given to grading both for quality and weight, the large English importers can now make contracts in advance for the supply of meat in England and cover them by C. I. F. purchases from the freezing companies and pastoralists in New Zealand.

Soon after the outbreak of war, the British government expressed a desire to secure the whole supply of mutton, lamb, and beef available for export, for the soldiers and the civilian population of England. The New Zealand government at once took the necessary steps to give effect to this request. Conferences of meat exporting interests, the freezing companies, the farmers' representatives, and the shipping companies were convened. A workable scheme was drawn up, a system of grading and a schedule of prices were agreed upon, and the cheerful co-operation of the freezing companies and suppliers was obtained.

The schedule of prices to be paid for the meat per lb. was as follows :

Wethers and maiden ewes first quality 72½ lbs. and under	4½d
" " " " " " over 72 lbs.	4¼d
" " " second quality including quarters and sides	4¼d
Ewes first quality 72 lbs. and under	4d
" " " over 72 lbs.	3¾d
" second quality	3¾d
Lambs special prime and Canterbury quality 12½ lbs. and under	5¾d
" first quality 42 lbs. and under	5½d
" " " over 42 lbs.	5¼d
" second quality including quarters and sides	5¼d
Beef prime ox	4¾d
" second and heifer	4½d
" boning in quarters	4d
" cow, prime	4½d
" " second	4d
" boneless	5d
(odd hind quarters ½d above and odd fore quarters ½d below schedule prices.)	
Mutton, legs	5½d
" shoulders	4½d
" loins	4½d
" haunches	5d

The scheme drawn up provided for the setting up of an Imperial Government Meat Supply Branch, and the purchase of all the meat available for export. The freezing companies supplied statements as to all meat in store, showing what was held on both their own and their clients' accounts. All meat was consigned to the British Board of Trade. Contracts between the shipping companies and the freezing companies were left intact. A board of reference was also appointed to adjust any disputes, and the whole business was carried out under the Prime Minister's personal supervision, with the assistance of Mr. R. Triggs, one of the Public Service Commissioners, and Dr. C. J. Reakes, Director of the Live Stock Division of the Department of Agriculture. The inspection and grading, the checking of weights and fixing of prices, etc. were carried out by the Live Stock Division of the Department of Agriculture.

Thus the biggest thing in the way of the disposal of surplus meat ever attempted in New Zealand was started on 3 March 1915, and before the end of that year (3 March 1916), 2,641,140 carcases of mutton, 3,777,299 of lamb and 490,301 quarters of beef, valued at over £7,440,000 sterling, were taken over for the British government, besides what was used in the dominion ; while the scheme ran so smoothly that the board of reference was not called upon to arbitrate in a single dispute.

In addition some 7,236 tons of cheese (the purchase of which was begun

Meat-Freezing Works in New Zealand (May 1916).

District	Name of Company	Locality of Works	Beef-killing Capacity per Day	Sheep-killing Capacity per Day	Storage Capacity, in 60 lb. Carcases Mutton	Products of Works
Auckland	Whangarei Freezing Company, Ltd., Auckland.	Whangarei Hds.	150	1,000	50,000	Frozen meat, preserved meat, hides, wool, pelts, tallow, manures, &c.
	Auckland Farmers' Freezing Company, Ltd., Auckland. F	Southdown ..	200	3,000	66,000	Frozen meat, tallow, dried flesh, manures, wool, pelts, glue, &c.
	Auckland Farmers' Freezing Company, Ltd., Auckland.	Horotiu	200	3,000	66,000	Frozen meat, tallow, dried flesh, manures, wool, pelts, glue, &c.
	R. and W. Hellaby, Ltd., Auckland. F	Westfield ...	120	500	3,000	Frozen meat, tallow, manure, wool, pelts, &c.
Poverty Bay, &c.	Tokomaru Sheep-farmer's Freezing Company, Ltd. F	Tokomaru Bay.	45	2,500	60,000	Frozen meat, wool, pelts, tallow, manure.
	Poverty Bay Farmers' Meat Company, Ltd., Gisborne. F	Kaiteratahi .	100	2,000	120,000	Frozen meat, preserved meat, tallow, manure, wool, pelts, casings.
	Gisborne Sheep-farmers' Frozen Meat Company, Ltd., Gisborne. F	Kaiti	150	6,000	150,000	Frozen meat, preserved meat, tallow, pelts, oil, manure.
	Nelson Bros., Ltd., Gisborne.	Taruheru ...	85	2,500	82,050	Frozen meat, casings, bungs, tallow, wool, pelts, hides, oil, manure.
Hawke's Bay.	North British and Hawke's Bay Freezing Company, Ltd., Napier.	Westshore ..	40	1,500	36,000	Frozen meat, wool, tallow, pelts, casings, manure.
	Thomas Borthwick & Sons (Aus.), Ltd., Christchurch.	Pakipaki	30	1,500	50,000	Frozen meat, tallow, pelts, oleo, manures, &c.
	Nelson Bros., Ltd., Tomoana. . .	Tomoana	80	3,000	92,400	Frozen meat, preserved meat, meat-extract, tallow, wool, pelts, hides, oil, manures, &c.
	Hawke's Bay Farmers' Meat Company, Ltd., Hastings. F	Whakatu	80	2,000	40,000	Frozen meat, tallow, wool, pelts, manures.
Taranaki	Thomas Borthwick & Sons (Aus), Ltd., Christchurch.	Waitara	200	2,000	90,000	Frozen meat, tallow, oleo, runners, pelts, wool, &c.
	Patea Farmers' Co-op. Freezing Company., Ltd. F	Patea	120	1,000	52,000	Frozen meat, preserved meat, tallow, manures, &c.
Wellington ...	Wanganui Meat-freezing Company,	Castlecliff ...	100	2,200	70,000	Frozen and preserved meat, meat-extract, tal-

	Wellington Farmers' Meat Company, Ltd., Masterton. F	Waingawa...	250	6,000	239,000	Frozen meat and sundries, wool, pelts, tallow, oil, hides, preserved meat, meat-extract, manures.
	Gear Meat Preserving and Freezing Company, Ltd., Wellington.	Petone.....	100	10,000	300,000	Frozen meat, preserved meat, meat-extract, tallow, manure, wool, oil, hides, pelts, &c.
	Wellington Meat Export Company, Ltd., Wellington.	Ngahauranga.	120	8,000	240,000	Frozen and preserved meat, tallow, manure, wool, pelts, casings, &c.
Marlborough .	Christchurch Meat Company, Ltd.	Picton	30	1,000	23,000	Frozen meat, wool, pelts, tallow, casings, manures, &c.
Nelson.....	Nelson Freezing Company, Ltd., Nelson. F	Stoke.....	—	350	10,000	Frozen meat, tallow, manure, &c.
Canterbury ..	Canterbury Frozen Meat Company, Ltd., Christchurch. F	Belfast.....	50	7,000	130,000	Frozen and preserved meat, wool, pelts, tallow, and manures.
	Canterbury Frozen Meat Company, Ltd., Christchurch. F	Fairfield	—	4,000	100,000	Frozen meat, tallow, wool, pelts, manures.
	Canterbury Frozen Meat Company, Ltd., Christchurch.	Pareora	25	4,500	125,000	Frozen meat, tallow, wool, pelts, manures.
	Christchurch Meat Company, Ltd., Christchurch.	Islington....	50	7,000	235,000	Frozen and preserved meat, wool, pelts, tallow, oleo, casings, manures, &c.
	Christchurch Meat Company, Ltd., Christchurch. F	Smithfield...	50	6,000	126,000	Frozen meat, wool, pelts, tallow, oleo, casings, manures, &c.
Otago	Christchurch Meat Company, Ltd., Christchurch.	Pukeuri.....	—	3,000	80,000	Frozen meat, wool, pelts, tallow, oleo, casings, manures, &c.
	Christchurch Meat Company, Ltd., Christchurch.	Burnside....	50	3,500	136,000	Frozen meat, wool, pelts, tallow, oleo, casings, manures, &c.
	South Otago Freezing Company, Ltd., Balclutha. F	Finegand,...	30	1,200	85,000	Frozen meat, wool, tallow, oil, manures, pelts.
Southland ...	Birt and Co., Ltd., Invercargill. .	Ocean Beach	100	2,500	110,000	Frozen meat, rabbits, casings, &c.
	Southland Frozen Meat Company, Ltd., Invercargill.	Mataura	50	2,000	87,000	Frozen meat, rabbits, wool, pelts, tallow, oil, manures.
	Southland Frozen Meat Company, Ltd., Invercargill.	Makarewa...	70	2,000	14,000	Frozen meat, rabbits, wool, pelts, tallow, oil, manures.
	Orona & West Coast Freezing Co. F	Fielding.....	100	2,200	70,000	Frozen meat, rabbits, wool, pelts, tallow, oil, manures.
	Westfield Freezing Co.	Westfield....	200	3,000	75,000	Frozen meat, rabbits, wool, pelts, tallow, oil, manures.

The total capacity of the meat-freezing works in New Zealand is shown to be as follows: sheep-slaughtering, 109,650 head per day; beef-slaughtering 3,085 head per day; cold storage, 3,516,450 60 lb. carcases of mutton.

by the government on 4 November 1915) were acquired in the same way, the payments to 2 March 1916 aggregating £481,359.

Thus it will be seen that the New Zealand pastoralists were compelled to seek an outside market. In England, co-operation grew out of co-operative distribution ; in New Zealand its first development was in the direction of co-operative production and co-operative marketing.

The expenditure and risk of sending frozen meat to England were so heavy and many of the sheep farmers were so involved, that freezing companies had to be started by the large farmers, stock owners, and land companies, and but for them the frozen meat trade could not at that time have been established at all.

Some of these early companies worked on co-operative lines. They were started and controlled by farmers. They reduced the cost of freezing, made better use of the by-products, secured lower freights, and so obtained for the farmers a better price for their stock, and made cornering by great trusts difficult.

But the large amount of capital required led in some cases to the inclusion of the ordinary investor ; and companies were formed which, while they secured lower charges and better prices for stock, departed from the true co-operative method of working.

This caused the farmers to erect other plants to compete with those in existence. Appended is a list of the New Zealand freezing companies. Those marked " F " are for the most part owned and controlled by the farmers.

From this it will be seen that the New Zealand freezing works can slaughter 109,650 sheep and over 3000 head of cattle per day and can keep in cold storage 3,516,450 carcases of mutton.

§ 1. Co-operation for production and sale.

Butter and cheese factories. — The growth of the frozen meat business was accompanied by an equally rapid expansion in the dairy industry, an expansion that led to greatly increased prosperity throughout the dominion generally, and especially amongst the small farmers. It is only about 33 years since co-operative dairies under the factory system were started in New Zealand. But the dairy companies were more successful than the meat companies in preventing capitalists from getting a controlling interest and in securing to the settlers a full return for their produce.

At that time the outlook for the small farmers was very disheartening. The output exceeded the local demand. The nearest outside market, Australia, was 1200 miles away. The main market in England was 16,000 miles distant. Stock was selling at ruinous prices, and butter at 3*d* to 4*d* per lb. So the dairymen, like the pastoralists, were compelled to co-operate to improve the quality of their produce and to reduce the cost of manufacture ; and after the introduction of refrigeration in 1882 they began to

combine in order to secure the most skilful managers and the very best and most up-to-date machinery and plant. The establishment of butter factories brought a market to the farmers who, for want of roads, could not get bulky produce to the market.

The first butter factories in New Zealand were established by private enterprise, but some of the early shipments were exported in tins, which led to financial failure and heavy loss. Few had faith in the possibilities of the industry. It was asserted that New Zealand butter could never command good prices in Great Britain on account of the distance and the time occupied in transit. But when the contents of two boxes, carried in the freezing chamber of a passenger steamer, were landed in England as perfect as when first made, the question of transit was settled; the industry began to expand and in a few years many of the proprietary companies were taken over by the farmers.

In 1882, the government offered a bonus of £500 to the first factory that turned out fifty tons of cheese. The following figures show the great expansion of the business since that date. The total value of the butter and cheese exported from New Zealand from 1872 to 1881 (both inclusive) was only £122,157.

During the year that ended 31 March 1915, 417,138 cwt. of butter valued at £2,305,246, and 793,777 cwt. of cheese valued at £2,389,123 were shipped from the dominion besides what was consumed locally. There are now 492 butter and cheese factories at work. These turned out last season 11,425 tons of butter and 59,699 tons of cheese. Of these factories not less than 357 are owned by the suppliers, and the number worked on co-operative lines is steadily increasing. Of late years the failure of a co-operative factory has been practically unknown. Most of them divide the profits amongst the suppliers who are also responsible if any losses are made. The amount paid for the milk from month to month is somewhat below its true value, but (after paying a small interest on capital) the surplus is divided amongst the suppliers at the end of the season. The government secured experienced men to advise the settlers how to start the factories; and where there are a sufficient number of settlers in the district, who own a sufficient number of cows and are willing to take shares in the concern, success is assured. A government officer usually attends a meeting of the settlers for the purpose of explaining how the business may be organized, and how the members of the company (by guaranteeing an overdraft at the bank) can raise the capital required to erect the building and instal the necessary plant. He also furnishes them with a plan of the building and particulars of the best machinery, and assists them to select the most suitable site.

Directors of the company are usually selected from amongst the most progressive men in the district, and they employ a secretary to attend to the books and a manager to manufacture the butter and cheese.

The government also appointed a number of dairy instructors who, by visiting the factories and farms, by practical demonstrations, and by expert advice have done much to extend co-operative dairies, and to

improve the quality and unformity of the butter and cheese, the means of transit, and the disposal and distribution in the English markets.

Legislation was passed regulating the manufacture, grading and branding of the butter and cheese, and the purity of the milk.

The system of free grading initiated by the department not only improved the quality but also facilitated the sale, as the government graders' certificates are accepted in the London markets, and the contracts usually contain the stipulation that the produce shall receive a certain number of points or be first grade. If there is any serious defect the factory is advised, so that it may be rectified at once. This system has proved so effective that last year, of 836,324 boxes of butter and 543,605 crates of cheese that were examined, more than 96 per cent. were placed in the first grade.

In some districts the principle of co-operation has extended to the establishment of refrigerating works by the dairy companies, each dairy company taking up so many shares in the venture. In this way the cost of freezing butter and of storing and chilling cheese has been reduced to a minimum.

A further instance of united action on the part of dairy farmers is afforded by the Egmont Box-making Company at Eltham. The membership in this concern (which operates a saw-mill and tramway lines, and owns large tracts of timber country), is confined to the dairy companies, who are supplied with all butter boxes and cheese crates required for their produce at a more reasonable price than would otherwise be the case. About 130 timber workers are employed and something like 2,000,000 feet of timber are felled and then milled and converted into butter boxes and cheese crates each year. The board of management is selected by the dairy companies interested in the concern.

The government has also fostered the formation of co-operative herd testing associations. This was commenced in New Zealand on the co-operative principle in 1909, by one association that tested 815 cows. In the following year three additional associations were started. Two years later the number of herd testing societies had risen to twenty, and they dealt with about 25,000 cows.

In 1913 the number of cows tested increased to 30,000. Besides these semi-officials associations many of the dairy companies are making herd testing a branch of the ordinary factory work, so that all their suppliers may benefit by the weeding out of unprofitable cows from their herds.

The Department of Agriculture also co-operated with the farmers' herd book societies, to start a register of merit containing the names and pedigrees of the best pure bred dairy cows. Records of the quantity of milk and the percentages of butter fat are kept by the owner, and checked by departmental officers who also take samples and determine the quantity of butter fat. These records are finally compiled by the department, the cows giving up to a certain quantity are granted a certificate by the government, and the results are published in the respective herd books. Photographs and particulars of exceptionally

good cows, holding the record for the highest yield, are published periodically in the Journal of Agriculture, and distributed widely throughout the dominion to stimulate others to improve their herds. The Holstein, Ayrshire and Jersey breeders have taken this up heartily, and the aim of the government — to increase the supply of bulls bred from dams with a high milk record — is gradually being accomplished.

As a typical example of the rise and progress of a farmers' company, and the manner in which the farmers' produce has been enhanced in price by co-operative production, we might instance the New Zealand Dairy Association, the largest in the dominion. The headquarters of this company are in the Auckland district. It was started in 1883 as a private company, to buy farmers' dairy produce. Butter at that time often sold for less than 4*d* per lb. but, owing to its variable quality, even with such low prices the company was not very successful at first.

In 1887 it erected a factory at Pukekohe: the price for milk was then only 2 ½*d* per gallon, but it was found difficult to obtain a satisfactory price for butter. In 1895 the association took over the business of another pioneer of the industry, Mr. Reynolds. At that time the association was paying the farmers about 7*d*. per pound for butter fat. A few years later the business was purchased by the suppliers, and formed into a co-operative company.

The quantity of butter made that year (1901) was 2,409,573 lbs. and the annual turnover of the company was £105,107. Last year this company manufactured 10,737,775 lbs. of butter, and 65 tons of casein, and the turnover was £651,920. Practically all the shares (with the exception of a few belonging to the employees) are held by the suppliers, who number about 2500; no supplier is compelled to take shares but the annual bonus is divided amongst the shareholders only. The company has now eight butter and cheese factories, about 80 skimming stations, and a casein factory. It owns property valued at over £100,000. The price paid last year for butter fat to shareholder suppliers at the larger creameries (including a dividend of 6 per cent on the paid up capital), was about fourteen pence per lb. or about double that paid in 1895; the suppliers to the smaller creameries receiving a trifle less, according to their quantity bonus. It is stated that there are only two dairy association of this kind in the world, that have a larger output, viz. the Beatrice Company at Lincoln (Nebraska, U. S. A.) and the Byron Bay Company in New South Wales. This company has for some years regularly tested the cows of its suppliers. In 1913 it tested about 3,800 cows. The average return per cow was 208.85 lbs. of butter fat. In the following year the average yield per cow was 283.6 lbs., an increase of 74.75 lbs. The best herd tested averaged 384.34 lbs. per cow and the worst herd 207.34 lbs. for the ten months. The worst cow tested that year gave a ten months' yield of 109.10 lbs; while the best, cow yielded 502.54 lbs. or a monetary return of more than £20 over that of the poorest one.

The company also purchased for its suppliers last year £19,800 worth of dairy requisites, such as milk cans, separators and cement, mo-

lasses, manures, and veterinary drugs. These are sold to the farmers at slightly over cost price, thus saving the producers a considerable sum during the year.

This company also (like others) assists its suppliers by advancing money to buy cows and milking plant, and manures to improve their farms, a portion of the monthly cheque for their milk being held back to repay the debt. This enables small landowners to tide over bad harvests and times of financial strain, and so to start farming without much capital.

Home separation. — When dairy factories were first started the farmers generally carted all their milk directly to the skimming stations, which separated the cream, sent it on to the central factories, and returned the skimmed milk to the settlers to feed their pigs and calves. There has, however, recently been a decided movement in the direction of home separation in some districts. At first there was considerable opposition to home separation as it was feared that it would reduce the quality of the butter. But in districts with bad roads and scattered farms, the system gradually spread, as settlers with small herds could sell their cream on the farms, although they could not send it long distances to the factory; so that with the increased supply and the more economical method of collecting, the cost of manufacture was very materially reduced, while the settler retained his own pure sweet skim-milk to feed his calves and pigs, thus diminishing any risk of spreading disease amongst his stock. There was some trouble about the quality of the skimmed milk at first, but instructors were appointed to visit the milking sheds in order to point out the best methods of cooling and handling it and to remedy defects when an inferior article was being produced.

Finally over 30 factories in the north of Auckland province agreed to grade all the cream, and pay the suppliers on a purity basis. This greatly raised the standard of the butter especially when the cream was delivered daily. In the Auckland province alone 5000 tons of butter were produced by this method last year, though butter made at factories from fresh milk still scores somewhat higher than that made from home separated cream. The dairy commissioner, Mr. D. Cuddie, is recommending companies handling this cream to insist upon a daily delivery, wherever practicable.

By-products, Casein, Sugar of Milk &c. — With the great expansion of business every effort was made by the dairy companies to utilise the by-products to the best possible advantage. Many of the larger cheese factories are now making "whey butter" and the experiment has proved so profitable that other companies are installing the necessary machinery to do so next season.

A company, formed at Edendale, has put in a plant to manufacture sugar-of-milk. In some districts large quantities of dried milk are made. In 1912 the Department of Agriculture sent an officer (Mr. Pederson) to Europe to secure all the information available with regard to the manufacture of casein, and two years later the department reported that 22 factories were engaged in the preparation of casein-curd, and that 5,960

cwt. valued at £2,400 had been exported in the previous season, which enabled the companies to pay an additional 1 ¼ *d.* per lb. for the butter fat. Two central dairy stations were erected, one at Frankton, capable of dealing with 1000 tons annually. But owing to the war affecting the markets and to the high price of cheese the quantity shipped in the following season was only 87 tons.

The following table shows the number of proprietary and co-operative factories at work in New Zealand each year from 1906 to 1915, their respective outputs of cream, and the percentage of the latter which was of proprietary make.

Year	Butter					Cheese				
	No. of Prop.	Output Tons	No. of Co-op.	Output Tons	Per cent. Prop. make	No. of Prop.	Output Tons	No. of Co-op.	Output Tons	Per cent. Prop. make
1906	103	9,061	108	13,436	40	22	657	60	6,911	8.6
1907	93	7,861	119	15,933	33	40	1,229	69	8,975	12
1908	67	5,588	114	15,361	26	51	3,178	88	12,326	20
1909	68	5,499	116	14,954	26	51	2,170	90	15,702	12
1910	71	4,999	118	19,536	20	66	3,315	113	21,032	13
1911	57	5,585	120	20,891	21	74	3,028	144	20,787	12
1912	53	5,443	119	20,810	20	65	3,061	159	23,372	11
1913	46	4,413	128	24,029	15	89	5,313	162	28,992	15
1914	46	5,910	135	25,477	18	87	5,576	206	32,310	14
1915	47	5,507	120	25,138	17	93	5,918	237	34,561	14

National Dairy Association of New Zealand. — Besides what has been done in the ways mentioned by individual companies to help their suppliers, they have gone a step further, and united to form a National Dairy Association.

This association organizes conferences to discuss matters affecting the producers' business. It imports factory supplies and other requisites required by the industry. It deals with all matters connected with the shipment of butter and cheese to England and Canada, reports on outside markets, secures specially low freights under lengthy contracts, arranges bills of lading, and generally supervises the export business in the interests of the members.

The National Dairy Association has been working on these lines for about 21 years, and it now has affiliated to itself 138 co-operative, and 33 proprietary associations, besides a number of exporting companies.

§ 2. Co-operative credit.

Rural credit associations and agricultural banks are forms of co-operation which have not, so far, met with much favour in New Zealand. It is urged that there is little need of agricultural banks of the Raffeison type, which grant short credit on the personal guarantee of the members, as very few of the New Zealand farmers are so poor that they have to club together to obtain the money to buy a pig or cow. The small farmers can obtain financial assistance from the farmers' auctioneering companies or from their own co-operative dairy companies ; repaying the loan either on re-selling their stock, or by monthly instalments deducted from their milk cheque. On the other hand settlers requiring longer and larger loans, secured by mortgage, can readily obtain them at a reasonable rate either from private lenders or from the State.

Advances to settlers. — The government more than 20 years ago took up the position that it was the duty of the State to provide the country settlers with necessary capital, as every citizen in the dominion was vitally interested in the increase of agricultural production.

Accordingly in 1894 legislation empowered the government to borrow money and lend it to country settlers, local authorities, or city working men, to be repaid by half yearly instalments of principal and interest, spread over periods of time up to 36½ years. It might also be wholly repaid at any time. The rate of interest charged is one per cent. more than the money costs ; and usually averages about 4 ½ per cent. The extra one per cent. is used to pay flotation charges and working expenses; and any balance is carried to a reserve fund, which is reinvested on mortgage.

The State Advances to Settlers Department has lent to deserving settlers over £20,000,000 since 1894. The loans authorized during the ten years 1906 to 1915 numbered 43,520 and amounted to £16,096,930. Yet during 18 years there were only 35 foreclosures and practically no losses. The cost of administration and working expenses in 1915 were only 0.12 per cent. or 2*s* 4*d* per £100 of the capital employed ; while the lowest working expenses of any of the European systems are said to be 0.34 per cent.

Although this is not a co-operative business (each borrower being responsible only for the amount of his own loan), it may be noted that all borrowers pay into a fund to provide against any individual loss. The net profits of the Advances to Settlers Department for the year ending 31st March 1915 were £ 57,434.

Advances to workers. — The State Advances Office also lends money up to £450 to enable any manual or clerical worker to buy or build a house, if he is not in receipt of an income of more than £200 per annum, owns no land other than the allotment on which it is proposed to build, and is prepared to reside permanently in the home when it is built. The interest on the advance (which is secured by a mortgage on the whole pro-

perty) is payable half yearly, with an instalment of the principal which by this means is fully repaid in either 36 ½ years, 30 years, or 20 years, as the case may be, when the mortgage is released. Valuation fees, and the cost of preparing and registering the necessary deeds, are fixed by regulation on an exceedingly low scale and are payable by the borrower.

A Wisconsin (U. S. A.) board after carefully investigating the Advances to Settlers system on New Zealand reported: "It has successfully maintained itself for over 20 years. It has directly benefited thousands of settlers by securing long time loans of capital for them at low rates of interest. It has promoted the development of the agriculture, manufactures and commerce of the dominion, by attracting settlers and enabling them to make their holdings productive. It has aided in the development of community advantages in isolated settlements by increasing the schools and other community facilities and it has indirectly benefited the entire Commonwealth."

The government is now considering the advisability of going a step further and starting agricultural banks similar to those that have proved so successful in other parts of the world.

§ 3. Farmers' mutual insurance companies.

The high rates of insurance on rural properties led to the formation of a number of farmers' mutual insurance companies on similar lines to those adopted in Canada and the United States. These companies can only accept isolated, non-hazardous risks in country districts; they stipulate that each property owner shall carry a portion of the risk himself and that no policy shall be accepted for more than two thirds of the actual value of the property. The principle adopted by most of these companies is to insure the property of their members for a period of years, taking a small fixed payment in advance to cover the simple expense of management and the cost of examining risks, and to meet any losses that are likely to occur in the ordinary course of business.

The members also give a guarantee or premium note for a certain percentage of the amount of the insurance policy. Should an unusually heavy loss occur, a small assessment is levied on this premium or guarantee note, *pro rata* if the funds in hand prove insufficient to meet the loss. The liability of members is, however, limited to the amount of their unpaid portion of this guarantee note which, on first class risks, does not usually exceed 1 ½ per cent. per annum of the amount of insurance affected.

It will be seen therefore that, under this system, the farmers have only to pay for the actual loss incurred, plus a small amount to cover the cost of working expenses. They have not to make dividends on a large working capital, nor have they to build up an enormous reserve fund, to protect themselves against the tremendous losses that sometimes have to be met when an entire quarter of a large city is burnt down.

These companies have been successful in reducing the cost of farmers' insurance in New Zealand by nearly 50 per cent. By keeping their working expenses low, they have built up substantial reserve funds, and apart from the monetary saving that has been effected, their management has proved of great educational value, as a means of training farmers in co-operative and business methods.

A recent revision of the empowering Act permits these associations to undertake accident business, and though none of them have taken advantage of this provision, the possibility of their doing so prevents the rates of the joint stock companies from becoming excessive.

§ 4. Co-operative trading companies.

No account of co-operation in New Zealand would be complete without some particulars showing what has been done by the farmers to obtain their supplies at a reasonable price, and to market their produce in the most economical manner. Strange to say the farmers are the only class in New Zealand who have been successful in running co-operative stores profitably. The largest organization of this kind in the dominion is the Canterbury Farmers' Co-operative Association. It was started in 1881 to improve the facilities for the co-operative marketing of the farmers' produce, and to procure for the shareholders such articles as agricultural implements, seed, corn sacks, wool packs, binder twine and other requisites, at a reasonable price and better in quality.

At first an arrangement was made with some of the business firms, by which members of the association were allowed special discounts on the goods purchased. But as soon as the country storekeepers learned that certain wholesale firms were willing to do this they threatened to boycott them, and the privilege was withdrawn.Consequently in 1882 the company opened up a retail business and erected offices and the necessary stores for wool, grain etc. near the railway. They started with a staff of a secretary and a boy, but the business grew steadily, and today the permanent staff numbers 750. In addition to the numerous retail departments, where everything can be obtained from a needle to an anchor, there are a number of special departments, such as the Land and Estate Agency Department, for the sale of farms and pastoral properties, the Live Stock Department, which conducts periodical sales of stock at various centres throughout the province, special departments for the sale of agricultural implements and motor cars, grain and seed; manure works; a bacon factory and freezing chambers; grain and wool stores; and a binder twine factory. In 1882 the turnover was only 15,234; last year it was £3,257,795. The net profits increased from £170 in 1882 to £60,031 in 1915.

A number of similar farmers' co-operative societies are working successfully in other parts of the dominion and arrangements have been made to federate them and to establish a Farmers' Co-operative Wholesale Federation of New Zealand.

Several other forms of co-operation have also been initiated by the New Zealand Farmers. There are co-operative egg circles which collect, grade and market eggs to the best advantage for their members.

To check excessive freights, ships have been chartered to carry the producers' wool to England. To reduce the cost of selling their stock and other produce, the farmers have also organized special farmers' co-operative auctioneerig companies.

In grain growing districts co-operative threshing machines are not uncommon. The sheep farmers have started co-operative sheep dips, co-operative shearing sheds and co-operative sales of wool.

A honey producers' association has been formed to grade and market the products of the apiary to better advantge.

The co-operative movement has also extended to fruit growing, once the most unprofitable of all industries by reason of the loose methods of marketing. Large quantities of fruit were grown, which in the absence of any settled market had to be practically hawked by the fruit vendors or consigned by individual growers to agents in the towns, a few of whom were not always too careful of the interests of their clients. In Auckland some nine years ago a Fruitgrowers' Co-operative Society was formed. From small beginnings it has worked up a very profitable business, introducing improved methods of selling and distributing fruit; and so handling the fruitgrowers' business that it has become increasingly profitable. Last year the society besides paying a dividend of 5 per cent. made a rebate of 10 per cent. on all coupons issued during 1915. The fruitgrowers of the dominion have further established a federation which meets in conference annually, and under its auspices great developments are taking place in the export trade.

The co-operative movement is still in its infancy in New Zealand and seems capable of almost indefinite expansion. As stated, important developments have arisen out of the war conditions. Still more numerous and still more important movements would have been inaugurated on co-operative lines, during the last eighteen months, had it not been that the great struggle in Europe necessitated the concentration of the energies of the State upon war matters. The government had planned to introduce legislation for the establishment of agricultural banks on the mutual aid principle, in order to enable the small holders to pool their resources and their credit, as security for advances for the development of their farms, the purchase of machinery and live stock etc. It seems certain that the establishment of such banks will form a feature in the legislation that may be looked for after the war. Beyond this there is again a growing feeling amongst the agricultral community that the time is approaching when, instead of being dependent upon the existing steamship lines, the farmers should acquire their own ocean cargo carriers, and although any schemes in this direction that have been thus far mooted are still very much "in the air", the fact that the farmers have begun to talk of establishing their own cargo service, is an indication that the proposals are by no means impossible of acceptance.

It is probable that New Zealand has more to learn from other countries

than it can teach its trade competitors. But the things it is doing it has learnt to do thoroughly and well, and its ears and eyes are always open to receive and profit by suggestions. Mistakes have been made and the experience gained has had to be purchased, sometimes at a heavy cost. But the position of the average farmer in New Zealand today is infinitely better than it was 20 years ago. He is more independent and self-reliant than ever; but his independence and self reliance are rather those of his class than of the individual. He has learnt the great lesson that union is strength, and the necessity for working with his fellows for his and their mutual advantage. Through his agricultural and pastoral associations, his farmers' clubs, his farmers' unions, his farmers' co-operative auctioneering companies, his co-operative freezing works, his dairy factory associations and trading companies, he has become a very real power in the land, and is no longer dependent upon the tender mercies of the merchant or storekeeper, but in a position to command his own terms, and to do business on his own lines.

What limitations the future may have in store for him it would be hard to say, for he is now in the happy position of being able to command practically all the capital he requires, mainly as the result of the many successful enterprises which he has initiated.

The following comparative figures indicate the rapid growth of the agricultural industry in New Zealand, and this has naturally been reflected in the progress and great prosperity of the dominion generally.

Population	1880	–	484,864.	1915 –	1,102,825.
Capital value of land in N. Z.	1882	–	£101,000,000.	1914 –	£365,342,237.
Area in cultivation	1881	–	4,768,192 acres.	1911 –	16,154,218 acres.
Area in occupation	1881	–	26,845,466 »	1911 –	40,238,126 »
No. of sheep	1881–2	–	12,985,085.	1915 –	24,901,421.
No. of cattle	1881–2	–	698,637.	1911 –	2,020,171.

The total value of the exports has more than doubled within 10 years, rising from £15,503,530 in 1905 to £31,038, 132 in 1915, or £28 4*s*. 8*d*. per head of population (excluding Maoris). This is the highest export trade per head in the world. The exports last year exceeded the imports by more than £10,000,000.

While this growth cannot be entirely attributed to co-operation and refrigeration, there can be no doubt that these have been amongst the most potent factors in promoting the increased prosperity of New Zealand.

Due credit must be given to the rising price level; but it is only just to point out that the main cause of the prosperity in recent years has been greater productivity, and this has been greatly stimulated by the improved methods of preparation and marketing, which were the direct results of agricultural co-operation.

MISCELLANEONS INFORMATION RELATING TO CO-OPERATION AND ASSOCIATION IN VARIOUS COUNTRIES.

ITALY.

1. IMPORTANT PRIZE COMPETITION FOR COMPANIES TRADING IN ORANGES AND TANGERINES. — *Gazzetta Ufficiale del Regno d'Italia.* Rome, August 1916.

In order to ensure a better outlet on home markets for oranges and tangerines grown in Italy, by facilitating and extending their consumption by every class of the population and throughout the country, a competition, to which prizes worth 70,000 liras attached, was inaugurated by a decree of 9 July 1916 for such companies and individuals as have organized the trade in oranges and tangerines in the kingdom by opening dépôts whence the fruit is sold to consumers directly in small lots of 5, 10 and 20 kilogrammes. The decree prescribes that in awarding prizes the number of dépôts which have been opened, the quantity of merchandise sold, the quality of the fruit and its cheapness be taken into account. The prizes are one of 30,000 liras, one of 15,000 liras, one of 10,000 liras and two of 5,000 liras. Each of them may be divided equally among competitors of equal merit. If such include both individuals and co-operative societies of producers the latter will receive, in addition to the prize awarded to them, a supplementary prize by way of encouragement of which the value will be equal to not more than a fifth of that already won. A sum of 5,000 liras has been set aside to provide these supplementary prizes. In order to compete for the prizes of 30,000, 15,000 and 10,000 liras it will be necessary to prove that the quantities of oranges or tangerines sold in a year have been, respectively, at least 10,000, 5,000 and 3,000 quintals.

Finally one of the prizes of 5000 liras will be assigned to whoever has popularized orange juice as a drink in the kingdom to a noteworthy extent, the juice having been scientifically preserved, or to whoever has otherwise made use of unsold oranges.

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2. DISTRIBUTION OF PRIZES TO CO-OPERATIVE SOCIETIES. — *Gazzetta Ufficiale del Regno d'Italia,* No. 152, Rome, 29 June 1916.

It is well known that one of the methods by which governments encourage the growth of co-operative societies is that of opening to them com-

petitions to which prizes attach. In Italy the most important of such competitions are those for the agricultural banks of Sicily, which were inaugurated in conformity with Article 24 of the Local Act on this subject, dated 29 March 1906, No. 100. In consequence three prizes, each of 1,000 liras, were recently awarded to the following institutions:

Cassa agraria sociale cooperativa of Licata (Girgenti), " which has many members and accomplishes many operations in agricultural credit, and which has founded a warehouse for the agricultural products of its members ";

Cooperativa agricola Vittorio Emanuele III of Raddusa (Caltagirone), " of which the action in support of the local agricultural industry is very useful, whether exercised by means of credit or of collective farms ";

Lega di miglioramento fra gli agricoltori of Sommatino (Caltanisetta), " which has in a small district become a centre for a considerable number of agriculturists, and which discharges its functions with praiseworthy regularity ".

Further two subsidies, each of five hundred liras, have been given by way of encouragement to the *Cassa agraria cooperativa* of Granmichele (Caltagirone), and to the *Cassa agraria di prestiti* of Montemaggiore Belsito (Palermo).

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3. THE FEDERATION OF RURAL AND POPULAR BANKS OF THE PROVINCE OF BOLOGNA, ON 31 DECEMBER 1915. — *Cooperazione popolare*, organ of Catholic co-operative and mutual aid societies, No. 10, Parma, 31 May 1916.

The *Federazione delle casse rurali e popolari della provincia di Bologna* is one of the most important federations of rural banks. On 31 December 1915 it combined 86 rural and popular banks having 7,544 members. The position of the banks is resumed as follows : their capital in shares was 147,348 liras ; financial deposits, 3,626,841 liras ; current accounts 54,264 liras ; interest collected and not due and various liabilities 50,091 liras ; bills in hand 1,768,312 liras ; deposits in financial institutions 1,188,544 liras ; miscellaneous assets 720,623 liras ; cash, merchandise and various securities 222,874 liras : income in 1915, 168,339 liras ; expenditure in 1915, 146,530 liras.

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4. THE COLLECTIVE FARM OF BORGO S. DONNINO. — *La Cooperazione italiana*, No. 1208, Milan, 8 September 1916.

In February 1906 the administrative body of the Civil Hospitals of Borgo S. Donnino (Parma) granted some 30 hectares of their landed property

on a lease of 11 years to the local *Cooperativa-Braccianti*. This society on asking this year for a renewal of its lease, the rent being raised from 2,650 to 5,000 liras a year, took the opportunity of showing in a short report that it has not only always well fulfilled its obligations by contract, but has also thoroughly discharged its functions; with the result that it has *a*) perceptibly improved its leasehold land, and *b*) exercised a beneficent influence on wages and other conditions of peasant labour. To prove the former of these claims the following figures are given as to the total production of the property, products being valued at market rates and conformably with the society's annual financial statement, to which the profit and loss account is added:

1906	value	of	products	in	liras	5,175.79	loss	in	liras	261.66
1907	"	"	"	"	"	6,997.73	"	"	"	1,459.62
1908	"	"	"	"	"	11,380.00	profit	"	"	410.32
1909	"	"	"	"	"	11,693.34	"	"	"	294.46
1910	"	"	"	"	"	13,239.56	"	"	"	1,223.50
1911	"	"	"	"	"	13,264.53	"	"	"	1,889.49
1912	"	"	"	"	"	13,265.15	"	"	"	157.90
1913	"	"	"	"	"	14,649.34	"	"	"	1,944.50
1914	"	"	"	"	"	17,539.38	"	"	"	2,742.75
1915	"	"	"	"	"	17,502.60	"	"	"	3,271.62

These figures are proof of remarkable work accomplished to give greater productivity to the property "according to the principles of science and of reasonable and practical agriculture". In this relation we read in the report that "there has really been no haggling over either ordinary or extraordinary labour. It has always been accomplished according to the advice and under the direction of the Office of Agriculture and the *Umanitaria*, and in collaboration with the Peripatetic Chair of Agriculture. In proof of this the account of the expenditure of members on manual labour might be produced, but it will suffice to relate one relevant fact: at the time when the contract was entered into, two small and humble families were living miserably on the land, always on the lookout for a chance of a day's work elsewhere; but today four families find on it their staple occupation, spending 4,500 liras a year, and earning 2,000 liras a year for ordinary or extraordinary work by the day, without taking into account the harvest and the threshing".

To prove its second claim, that concerned with wages and conditions of labour among the peasants, the report states: "The society has notably influenced wages and hours of work. It has paid labourers on a scale determined by their own organizations after discussion; and, unlike almost all private employers, has scrupulously followed a timetable fixed for labour, thus acting as an element of stability in a large agricultural

zone. While on the one hand by intensive culture it has quadrupled the amount of employment, on the other it has reduced working hours without consequent loss to itself. A double result has been obtained by these means: a larger number of peasants have been employed, and a practical proof has been given of the fact that the growth of collective farming will provide a salutary remedy both for the unemployment and for the emigration of peasants".

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5. TWO NEW CO-OPERATVE SOCIETIES FOR THE DRYING OF COCOONS. — *La Cooperazione Rurale*, No. 7, Rome, July 1916.

After the happy experiment in the province of Cremona, where there are flourishing co-operative societies for the drying of cocoons, the recent formation of two other societies of this kind should be noticed, one at Gallerata and the other at Monza. That in the district of Monza, founded by the initiative of the local Agricultural Committee, has the following aims:

a) to instal and to work cocoon dryers in the district;

b) to open to members warehouses for the deposit, preservation and safe-keeping of cocoons;

c) to organize an easy economical method of making advances on such deposits;

d) to sell, in the name of individual members or collectively, their various lots of cocoons.

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6. THE "SOCIETÀ ORTICOLA DI LOMBARDIA". — *Decreto luogotenenziale, No.* 199, *del* 10 *febbraio* 1916 as to the approval of the new by-laws of this society.

Among non-co-operative agricultural societies an important group is constituted in Italy by the horticultural societies who aim at the encouragement by various means of the technical progress of horticulture. There are some thirty of these societies (1). One of the oldest of them is the *Società Orticola di Lombardia*, which has its headquarters at Milan and was founded

(1) See the recent publication of the *Ministero di Agricoltura, Industria e Commercio - Direzione generale dell'Agricoltura: Notizie intorno alle associazioni agrarie esistenti in Italia al* 1° *Gennaio* 1914. Rome, 1915.

in 1865, and which has, according to its new by-laws approved by the decree of 10 February 1916, the following aims :

a) To initiate and extend the progress of horticulture, and to assist the improvement and growth of every branch of science, industry and trade related to it ;

b) To spread technical knowledge of all subjects concerned with horticulture in general and with its dependent arts and industries, and to render widespread a knowledge of the laws of the State, general and local ordinances and social provisions which have most interest for horticulturists — to which end the society proposes to found and circulate its own newspaper, to provoke public discussion of special topics ; to organize meetings, lectures, lessons, practical demonstrations and instructive excursions ; and to hold special competitions for original literature useful to horticulture ;

c) To form temporary or permanent institutions for instruction in horticulture, or to encourage their formation;

d) To form or to assist economic institutions which shall aim at *co-operation as applied to the production, the purchase and the sale of horticultural products*, or at *thrift* in its multiple forms.

The society comprises ordinary members who pay 10 liras a year and belong to the class of owners of gardens, market-gardens and orchards, amateur horticulturists, teachers of the agricultural institutions, traders in horticultural products and others ; perpetual members who make a single payment of 300 liras ; and sectional members who belong to the Horticultural Society of the Lombard District. It is managed by a council of 15 members nominated by the ordinary members.

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7. AN ENQUIRY INTO THE EFFECTS OF THE WAR ON THE CO-OPERATIVE MOVEMENT. — *La Cooperazione Italiana*, organ of the *Lega Nazionale delle Cooperative Italiane*, No. 1204, Milan, 11 August 1916.

In order exactly to discover the effects of the war on the co-operative movement in Italy, and to collect the necessary material for the preparation of a scheme for the internal reorganization of the federated societies, the *Lega Nazionale delle cooperative* (Milan) recently decided on a special enquiry. We reproduce in its entirety the list of questions which for such purpose it sent to the consumers' co-operative societies. The league intimated when sending these that it will, by degrees, make analogous investigations into the condition of labour, agricultural and other co-operative societies.

" Form of enquiry, Number 1 : Co-operation among consumers.

Co-operative society of...

1) Has the war injured your society?

2) Has your general course of business been interrupted, arrested or suspended?

3) Do the total sales of 1916 show an increase or a decrease on those of the corresponding months of 1914-1915?

4) How many of your members are now under arms?

5) Is your administrative committee complete or are some members lacking to it?

6) If it be not complete why has it been impossible to nominate members to fill the vacant places?

7) Does the committee meet regularly?

8) If not, why not?

9) How are you books kept?

10) How are your warehousing and sales managed?

11) Have you an inadequate staff?

12) What are the other disabilities from which you suffer or with which you are threatened?

13) What is your opinion on the society's present condition, and what expedients might, in your opinion, extricate it from its difficulties?"

The circular accompanying this interrogatory intimates that the scheme already mentioned, for the interior reorganization of the societies, tends to make the Italian co-operative movement "more scientifically cohesive", in that it groups the different forms of co-operative societies together on the basis of the community of their trading and industrial interests.

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8. TOWARDS GENERAL STATISTICS OF THE CATHOLIC RURAL BANKS. — *Cooperazione popolare* organ of the *Federazione italiana delle casse rurali*, No. 9 Parma, 15 May 1916.

Among the most important actions of the lately reorganized *Federazione italiana delle casse rurali cattoliche* of Bologna, its compilation of the general statistics of the rural Catholic banks deserves notice. This year the federation has already published a list of these banks (1) showing that in 1915 there were about 2,000 of them. Wishing to know their financial position it has now decided to prepare more ample figures; and for this purpose has drawn up a form of questions which it has distributed. This asks the societies to supply the following facts:

a) name and site of the society;

b) legal form — whether it has collective or limited liability;

(1) *Elenco delle casse rurali (società cooperaive in nome collettivo) e altre piccole cooperative di credito esistenti nel* 1915. Parma, Cooperativa Editrice L. Buffetti, 1916.

c) year of formation ;
d) number of members ;
e) amount of capital in shares, working capital and reserve funds ;
f) total amount of various deposited liabilities ;
g) other liabilities — current accounts, bills of exchange issued, rediscount of bills of exchange ;
h) loans made — securities on hand ;
i) capital in credit establishments ;
j) other assets - credits, merchandise, machines etc. ;
l) final observations — credit institutions lending to the bank or with which it has a balance ; institutions connected with it and founded near it ; annual amount of collective agricultural purchases.

We will in due course report the results of this statistical enquiry which will show the actual importance of the Catholic rural banks and enable the federation to undertake that general reorganization of the co-operative credit societies which has for some time been the object of its ambition.

SPAIN.

CO-OPERATIVE CONSUMPTION IN CATALONIA. — *Bulletin of the "Museo Social"*, 8th year, No. 38, Barcelona, April 1916.

The *Museo social* of Barcelona sent to the consumers' co-operative societies in Catalonia a form of questions which aims at an exact knowledge of the development in this district of co-operation in consumption. This form asked each co-operative society for facts as to the number of its members and the value represented by its operations in 1915.

With the answers it received the *Museo Social* drew up various tables. These have an interest although they do not entirely fulfil expectations. It is, for instance, regrettable that they do not distinguish between urban and rural co-operative societies, and that the nature of the articles sold, and the proportions in which they are sold, are not shown. It is true that the *Museo Social* in bringing forward these tables states that such omissions are partly due to its own moderation in enquiry, since it proposes to make later, more complete investigations, and wished not to discourage the interested co-operative societies, and not to increase any unwillingness they might have to supply facts.

We take the chief data contained in these tables.

Number and Membership of Co-operative Societies.

Provinces	Number of Co-operative Societies		Number of Members	Average Membership of a Society
	registered	having supplied facts		
Barcelona	179	127	13,902	109
Gerona	44	32	10,548	329
Lerida	14	4	193	48
Tarragona	70	30	4,808	160
Catalonia	307	193	29,451	152

According to the number of their members the co-operative societies are distributed as follows:

Co-operative Societies having	Number of Co-operative Societies				
	Barcelona	Gerona	Lerida	Tarragona	Total
Less than 25 members	31	5	—	—	36
» 26 to 50 »	27	4	3	4	38
» 51 » 75 »	21	2	—	5	28
» 76 » 100 »	22	2	1	7	32
» 101 » 250 »	16	7	—	11	34
» 251 » 500 »	7	6	—	1	14
» 501 » 1000 »	1	2	—	1	4
More than 1000 »	2	4	—	1	7

If we examine the operations of these societies in 1915 we obtain the following figures:

Provinces	Total value of sales — pesetas	Average value of sales in each society — pesetas
Barcelona	11,160,486	87,877
Gerona	3,512,232	109,757
Lerida	17,725	4,431
Tarragona	1,297,968	43,265
Catalonia	15,988,411	82,841

As regards the value of their sales the co-operative societies are distributed as follows :

	Barcelona	Gerona	Tarragona	Lerida	Catalonia
Groups: Co-operative Societies having annual sales of value of:					
less than 10,000 pesetas . .	14	5	4	5	28
from 10,001 to 25,000 » . .	21	6	—	6	33
» 25,001 » 50,000 » . .	39	3	—	9	51
» 50,001 » 75,000 » . .	18	6	—	6	30
» 75,001 » 100,000 » . .	13	3	—	2	18
» 100,001 » 250,000 » . .	14	6	—	2	22
» 250,001 » 500,000 » . .	6	2	—	—	8
more than 500,000 » . .	2	1	—	—	3
Number of Co-operative Societies having sold to each member in the year value of:					
less than 250 pesetas . . .	11	8	4	11	34
from 251 to 500 »	18	14	—	8	40
» 501 » 750 »	33	8	—	9	50
» 751 » 1,000 »	18	2	—	1	21
» 1,001 » 1,250 »	14	—	—	1	15
» 1,251 » 1,500 »	8	—	—	—	8
» 1,501 » 1,750 »	5	—	—	—	5
» 1,751 » 2,000 »	5	—	—	—	5
» 2,001 » 2,500 »	4	—	—	—	4
» 2,501 » 3,000 »	5	—	—	—	5
more than 3,000 »	6	—	—	—	6

In conclusion we note that if the proportion of the population of each province to the number of members of co-operative societies within it be calculated, it will be found that the latter constitute 1.21 per cent. of the population in the province of Barcelona, 3.29 per cent. in that of Gerona, 0.67 per cent. in that of Lerida, and 1.42 per cent. in that of Tarragona.

UNITED STATES.

A RURAL CO-OPERATIVE LAUNDRY. — Hangon (C. H.) in the *Yearbook of the U. S. Department of Agriculture*, 1915.

In an article in this Review (1) we have resumed the ambitions of farmers in the United States as regards the improvement of their domestic

(1) Issue of December 1915, 6th year, No. 12. " What American Farmers need ".

conditions, ambitions which were discovered by an inquiry made by the Federal Department of Agriculture.

The tendency of women of the farmer class is to substitute, wherever possible, mechanical for human labour, thus effecting an economy in time if not in money. Of their domestic duties that of doing the household washing is among the most burdensome, and they seek to render it less fatiguing by using laundry labour-saving machines as much as is possible at home. It is not surprising that the idea of founding a co-operative laundry, to supply the needs of a rural community, was very favourably received at Chatfield in Minnesota.

The members of the local co-operative creamery decided in the spring of 1912 to use a sum of $2,000 — representing deferred dividends — in order to build an addition to the creamery which should serve as a laundry, provided a corporation were organized to whom it could be let. The local Farmer's Club supported the scheme by a vote in which women as well as men had part. A committee was appointed to study other laundries of this description; and the organization was perfected, purchasers of stock were secured, the company was incorporated, the building erected and its plant procured so rapidly that the laundry was able to begin work on 2 December in the same year.

The company is organized under the co-operative laws of the State. Its capital is fixed at $5,000 in shares of $5 each, each shareholder having only one vote. The company after paying 6 per cent. dividends on all shares refunds a portion of the remaining surplus in the form of a rebate. About 30 per cent. of the capital stock is held by the townspeople who are not shareholders in the creamery company. The creamery company owns the building which it lets to the lanndry company for $10 a month — a rent equivalent to 6 per cent. of the capital invested in it —, and it supplies power and heat for about $15 a month.

The laundry usually employs eight persons: the superintendent, an experienced laundryman who receives $25 a week, a forewoman in receipt of 20 cents an hour, and six girls each in receipt of 15 cents an hour. The employees are directly responsible to the manager who is the secretary of the laundry company and of the creamery's board of directors.

The building measures 30 by 70 feet and cost about $2,000. The equipment cost about $3,000, and is sufficient to do washing bringing in about $400 a week. It is of the most modern type, comprising one one-compartment and two three-compartment wooden washers, an extractor, a soap and a starch cooker, a five roll mangle, two compartment drying rooms, various ironing machines and utensils, a dip wheel starcher, trucks, baskets and a standard scale. The washing is subjected to steam under pressure — disease germs being thus destroyed — and no chemicals whatsoever are employed but only the purest soap.

Five cents are charged for a pound of washing, including ironing on the flat and ironing all underwear and stockings. An extra charge, based on the time required for the work by an expert hand-ironer, is made for

all ironing which cannot be done in a mangle. The average weekly cost of a family's washing is $1.05.

The farmers bring their washing when they bring their cream, and fetch it on the following trip, and consequently enjoy a 10 per cent. rebate on their laundry bills. The sum of the latter is deducted from their monthly cream cheques. Within the city limits washing is collected and delivered by a local drayman and paid for on delivery.

The business of the Chatfield Co-operative Laundry has developed steadily since its foundation, as appears from the following financial statement:

	First month, December 1912.	1 Jan. 1913 to 1 Jan. 1914.	1 Jan. 1914 to 1 Jan. 1915.
Total receipts	$ 337.95	$ 5,065.05	$ 5,856.02
Wages	262.23	3,845.54	4,589.88
Dividend	12.00	150.00	150.00
Rebate	33.80	506.50	585.60
Running expenses	29.92	563.01	530.54

Statements by its customers prove that the laundry is giving full satisfaction.

"In the conservation of mothers on the farm", writes one farmer's wife, "rural co-operative laundries rank first, in my opinion. Having had 25 years' experience as a farmer's wife, I can say that I have taken more comfort the past three years than ever before because of having dispensed with the washing and ironing. This change gives one two days of recreation that I can call my own every week and also gives me more time in which to accomplish the household duties. I have never had cause for complaint, as all articles come back in good condition and I see no reason why the work is not as satisfactory as that at home, if not better... The men on farms have sane ideas about the laundry as a labour saver, and are proud of the fact that by milking a few extra cows to compensate for the outlay, they are doing their share to help lighten the household work..."

Part II: Insurance and Thrift

SWITZERLAND.

PARTICULAR FORMS OF AGRICULTURAL INSURANCE.

by Dr. G. Rocca.

The Federal Department of Public Economy has recently issued to the Swiss press a communication which gives the results of the investigations made by the Agricultural Commission for the Encouragement and the Improvement of the Cultivation of Cereals. It recognizes the importance of agricultural organizations in this connection. In order that Swiss agricultural enterprise, which has the advantage of favourable conditions of climate and soil, may increase the area in which products are cultivated and improve its yield, the formation and the action of agricultural organizations, aiming at a rational popularization of the most recent discoveries of science and agricultural economy, must be encouraged.

And since among agricultural organizations institutions of thrift are notably important, we will mention in these pages several forms of agricultural insurance, which have an interest due not only to their development within the territory of the Confederation but also to the possibility that they may eventually be found in other countries.

§ 1. Insurance of vineyards against hail.

In a preceding article on the law and the organization of agricultural insurance in Switzerland (1) we spoke of the mutual insurance society against hail formed by the owners of vineyards in the canton of Neuchâtel under the

(1) See *International Review of Agricultural Economics*, vol. LXIV, 7th year, No. 4, April 1916, p. 37.

name of " Le Paragrêle ". We then indicated what were the particular obstacles to the development of this society within its much restricted sphere and the grave risks incurred in insuring vines which are among the agricultural assets most liable to injury by hail.

Since this mutual insurance society, which was founded in 1875, has discharged its functions for more than thirty years to the entire satisfaction of the local viticulturists, we think there is interest in the chief rules by which it works, and the chief results shown by its last report, kindly sent to us by the directors.

The head quarters of the society are at Neuchâtel and the duration of its existence is not determined. Its object is wholly or partly, and according to and within the limits fixed by its by-laws, to guarantee the vineyards of its members against losses consequent on damage by hail.

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a) *Conditions of admission. Premiums and indemnities.* Every owner of vineyards in the territory of the canton of Neuchâtel may become a member of the association. It is to be noted that, according to the new federal census of 1 December 1910, the canton had 134,910 inhabitants distributed in 69 communes, and that the area of its territory was only 808 square kilometres.

The signature of the membership form implies an obligation to pay the annual premiums, and any supplementary contribution which may be needed in order to meet claims and pay the costs of administration. Every member is bound for one year only : it might be expedient, or the sake of the stability of the society, to extend the contract over several years.

The annual premiums is fixed at 6 per cent. of the insured value. A supplementary contribution is due, by the provision of the administrative council, only if the ordinary premiums and a sum taken from the reserve funds do not suffice to meet claims. This supplementary subscription is assessed proportionately to the normal premium, being equivalent to not less than 20 per cent. and not more than 100 per cent. of its amount.

All owners of vineyards are considered as insured for the current year if they have been members of the society for the preceding year and have not rescinded their contract in writing before 1 April. Like all associations for insurance against loss the society does not become in any respect fully active until the premium has been paid.

The insured person may extend the guarantee to cover other vineyards or increase the sum for which he is insured in any month of the year, so long as the new insurance do not cover vineyards already injured by hail.

The annual premium is payable at the offices of the society or its authorized representatives. If insurance contributions have not been paid on 1 April they are formally demanded in the first fortnight of May, and a refusal to respond fully qualifies for expulsion from the society.

Members who have resigned or been expelled lose all and every right

to the property of the society, particularly to the reserve funds. Members are exempted from all individual responsibility as regards obligations assumed by the society, which are guaranteed solely by the property possessed by the society in its own right.

An interesting limitation is established by Article 9 of the by-laws. This aims at avoiding what are called accumulated risks, in other words at preventing losses from occurring with particular intensity in a given zone of the territory in which the society operates, an eventuality which would endanger the balance between premiums and reserves. To avoid this agglomeration of risks, insurance societies operating within a large territorial sphere select risks carefully. They often consent to insure within determined communes or groups of communes only up to a certain value, considered as the maximum or full risk, or else they exact payment of additional premiums, or reinsure a part of the risks for which they have become liable. The society of " Le Paragrêle " contents itself however with establishing a certain proportion between the insured value and the area of cultivated land. No vineyard extending over an " ouvrier " of 352 square metres can be insured for less than 50 francs or more than 100 francs. In every case the indemnity is proportionate to the damage caused by the hail.

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In case of a loss incurred the member must notify the directors of the society in writing, immediately or, at latest, within eight days. No claim is considered after the lapse of this period.

Payment of indemnities is provided : (1) by the net product of paid up premiums ; (2) by the profits of the society's property ; (3) by means of sums taken from the reserve funds ; (4) by the levy of supplementary premiums.

If the net product of the premiums, the interest on the society's capital in shares and the deductions from the reserve funds do not suffice to pay all indemnities and cover costs of administration, the society may have recourse to a levy of supplementary premiums until these shall have become equivalent to 100 per cent. of the ordinary premiums. If then indemnities cannot yet be paid fully the society is authorized to reduce them for all insured persons, proportionately.

If at the close of a financial year there be a balance of receipts, such excess profits are paid into the reserve funds.

The society cannot take more than half the amount of these to meet claims in one year.

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b) *Estimate of losses.* — A first and rapid estimate of losses is made within ten days of the fall of hail. Indemnities are then fixed by a commission of experts composed of three members, two mominated by the administrative council and one by the communal council of the district in which the hail fell.

In this interesting case the collaboration of an agricultural association with a public body has caused no important difficulties ; and it would be instructive to endeavour to apply the same method to other branches of insurance, for such limited intervention of the commune tends to popularize the theory and practice of thrift among agriculturists, while it increases public confidence in the insurance society.

The administrative council of the society also nominates two supplementary members who may make estimates as a subsidiary commission if the claims be numerous. This arrangement is also very practical : it is obvious that in the interests both of the society and of the insured persons estimates should be made as soon as possible after the damage has been incurred, for their justice is thus better guaranteed and fraud on the part of unscrupulous insured persons can be avoided.

It is also noteworthy that in order better to secure the impartiality of the commission it is laid down that experts nominated by the administrative council may not exercise their office in the place which they inhabit.

The experts hold office for three years, after which their tenure may be continued. They are summoned together by the directors of the society.

When an estimate has been made it is communicated to the interested owners, either by letter or by a notice in the official gazette of the canton, the office of the society in which the results of the investigations may be examined being indicated. If the insured person be not satisfied he may demand a second investigation, and this will be made by three other experts, one of them nominated by the administrative council, one by the communal council and the third by the interested person.

The demand should be presented in writing to the directors, within eight days of the appearance of the communication as to the results of the investigations. The costs of the second investigation are chargeable half to the society and half to the owner presenting the demand.

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c) *Administrative organization.* — The organs of the society are : (1) the general meeting of members ; (2) the administrative council ; (3) the directors ; (4) the officials.

The *general meeting* of all the members is usually held once a year, if possible in November. An extraordinary general meeting may be summoned whenever the administrative council thinks fit, or at the written demand of at least one tenth of the members.

The summons is by notices published at least fifteen days before the meeting in the official gazette of the canton and another newspaper of the canton of Neuchâtel.

In general the deliberations of the meeting are valid, whatever number of members be present at it, and its resolutions are passed by an absolute majority of the members present. These resolutions are of course binding

on all members, even those absent from the meeting at which they were passed. Each member has only one vote.

The principal duties of the general meeting are —to nominate the administrative council and the officials ; to examine reports submitted by the council ; and to deliberate as to modifications of the by-laws, and as to the dissolution or continuation of the society, etc. In case of dissolution the business of liquidation will devolve on the administrative council ; and the balance of property held by the society will be appropriated to an object of public utility favouring viticulture in the canton.

No motion proposed by an individual member may be the subject of deliberation at a meeting if notice of it have not been sent to the administrative council at least fifteen days beforehand, and if it have not been examined by the council.

The general meeting is presided over by the president of the administrative council, or, failing him, by another member of the council.

Every motion for a modification of the by-laws must be entered on the list of the agenda of the meeting at which it is to be discussed. It will not be carried except by a majority of at least two thirds of the members present at the meeting. A motion for the dissolution of the society cannot be carried except by a majority of at least three fourths of the members present at a meeting.

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The *administrative council* is composed of five members, chosen from all the members of the society by a secret ballot at a general meeting, to hold office for three years. They may be re-elected. The council nominates from among its own number a president and a secretary, the latter receiving a fee.

The administrative council has most extensive powers as regards the conduct of the society's business. It has the duty of nominating the director and fixing the amount of his renumeration, convoking the general meeting, and submitting to it financial statements and, in relation to them, a report on the action and development of the society. Council members may not vote at general meetings when their own actions are under discussion.

The council must also fix, within the limits prescribed by the by-laws, the amount to be taken from the reserve funds for payment of indemnities, the amount of supplementary premiums, and, when need arises, the proportion in which indemnities are to be reduced.

Council members receive for their attendance counters to which the general meeting affixes a value ; and this system of remuneration seems to be both practical and entirely suitable. It is true that the administrators of many mutual aid societies give their services quite gratuitously, but — as Gobbi justly observes in his well known study of societies of this type — the system of unpaid administration has more drawbacks than it has advan-

tages. It is clear that ambition or philanthropy may always induce many persons to desire umpaid offices, but the societies cannot by their means always secure the assiduous services of competent persons.

" In proportion as the number of those who do not need to be paid for their work diminishes, and the difference between the social positions of those employed on administrative work and on agricultural or industrial production grows slighter, the unpaid administrative offices tend to disappear ".

In its external relations the society is represented by the president of the administrative council and the director In such capacity they can by their collective signatures impose obligations on the society. One or two administrative councillors can replace them as regards this function if necessary.

The *director* of the society is nominated by the administrative council. He can be chosen from among the members or otherwise. His honoraria and other fees are fixed by the council. He has especial charge of the finance, being expected to superintend the recovery of premiums and the payment of indemnities.

The *officials* are nominated every year by the general meeting and are obliged to present an annual report on their activities. They receive counters for their attendance equal in value to those given to the members of the administrative council.

d) *Financial Statement of the Society of " Le Paragrêle " for* 1915. *Grants in Aid of Insurance against Hail.* — 1915 was a good year for the society. Only one fall of hail was recorded and therefore only 316 francs was paid in indemnities. The risks of hail vary very much from year to year ; and therefore, after covering the costs of estimates and investigations and of administration, the society prudently paid its excess profit — of 33,000 francs — into its reserve funds. In 1915 its membership was 528 ; and its receipts amounted to 37,443 francs, including premiums for 34,007 francs, 3,338 francs in interest, and a balance of 85 francs from the preceding year. The general costs of administration amounted to 3,928.63 francs : including 365.20 francs for taxes, 284.70 francs for printing, 124.53 francs for notices in newspapers, publications etc ; 2,750.35 francs for fees and sums paid to agents ; 370.90 francs for office expenses ; and 32.95 francs for commissions to the bank. Honoraria paid to experts amounted only to 78.65 francs.

On the credit side the financial statement shows a balance on hand of 821.72 francs ; 48,324.25 francs due from various debtors ; and 60,018 francs in securities, comprising about 9,000 francs in Swiss railway bonds, left in the Federal Department of Finance as a legal cautionary deposit, and the remainder in bonds of various credit institutions of the Swiss cantons (canton of Neuchâtel, Cantonal Bank of Thurgovia, Land Credit of Neuchâtel, etc,), and deposited in the bank of Pury and Co. in Neuchâtel. On the debit side occur indemnities amounting to 316 francs, 108,750 francs as the amount of reserve funds (increased, as has been said, by

33,000 francs during the year), and 97.97 francs as a balance to carry over to 1916.

From the report rendered by the administrative council to the general meeting of members and dated 9 December 1915 we learn, among other things, that by a decree of 11 December 1914 the Federal Council reduced the federal grant in aid of insurance against hail to 20 per cent. of the amount of the premiums, from its former level of 25 per cent. The cantonal authority, on the other hand, maintained its similar grant at its former level, that of 25 per cent. of the premiums. These grants are a result of Article 13 of the federal law of 22 December 1893 as to the improvement of agriculture, and Article 76 of the rule of 10 July 1896 for its application. The federal may never surpass the cantonal grant in amount.

The system of grants in aid has been criticized by some writers, who observe that the product of taxes paid by the community in general is appropriated to pay these grants which profit only one class, namely the insured agriculturists. It has been retorted that a general interest is in some sort concerned, that of the stability of agricultural revenues and the diffusion of principles of thrift among those who need to practise them. A second criticism is that agriculture is liable to many other losses which also the State ought to take into consideration. Mr. Muller, an official of the Federal Department of Agriculture, has stated in a pamphlet on the subject, published in 1886, that a single late frost can ruin the products of about 30,500 hectares of vineyards and thus cause a loss of 20 to 30 millions. A cold and wet spring can injure all the fruit trees, which often furnish no less an income than the vineyards. Exessive drought can enforce a reduction of live stock, the sole resource of many agriculturists. Rainy summers can reduce hay and corn harvests by 25 per cent. and thus cause a loss of several millions. A long series of the further misfortunes which, too often, kill the hopes of agriculturists, might be cited.

However the grants in aid are justifiable in view of the peculiar obstacles to the development of insurance against hail in Switzerland, whether these exist because the risk varies very much from one district to another, or because the property to be guaranteed is particularly liable to damage by hail.

It should be noted that, except in the canton of Tessin, all the land of the Confederation on which the harvests can be insured lies on the northern slopes of the Alps between the Jura and the Rhine, and can be largely devastated by a single hail storm, as Mr. Muller recalls when he cites the case of a fall of hail in 1831 which affected all Switzerland from Geneva to Lake Constance. The example of the society of " Le Paragrêle ", whose organization we have explained, is the more noteworthy because of the grave risks to which vineyards are subject. It is, for instance, notorious that the same fall of hail will often do from twice to five times as much damage to vineyards as to cornfields. It is evident that the difficulties inherent in the fixing of a tariff for premiums and in the paying of indemnities have been surmounted by that spirit of solidarity which characterizes all local mutual aid societies.

§ 2. Insurance against the risk of floods.

A) *General remarks.* — Insurance against the risk of floods aims in general at indemnifying for any damage done to the insured property (real estate or agricultural products) by the sudden flooding of the banks of a stream of water, or by the spate of streams or falls.

In 1913, 12 societies, three of them being Swiss, one French and eight German, were authorized to undertake this branch of insurance. The Freuch society, " L'assurance générale des eaux et autres accidents mobiliers et immobiliers " makes this form of insurance the principal branch of its activity. In all the other societies such insurance is only accessory to insurance against fire, accidents or civil liability. The societies often assume, in addition to the risk of floods as described, that of the civil liability which owners or lessees of real estate may incur through any claims for indemnity for damage done by water to a third party.

It should be noted that among the different societies operating in this sphere only the " Nationale Suisse " keeps the administration of insurance against the risks of aqueducts and of floods separate : a just distinction since — as the Federal Office for the Superintendence of Insurance Societies notes — they are two fundamentally different forms of insurance, having in common only the element which causes accidents.

The " Nationale Suisse " is also the only society which can insure Swiss agriculturists against the risk of spates resulting on rain or thaw. As the Office for Superintendence observes, although insurance against this risk may at first seem hardly possible, some remarkable statistics collected in Switzerland and Germany allow its gravity to be determined up to a certain point and even furnish guidance for the calculation of premiums. This form of insurance remains however very dangerous for societies practising it, and needs especial precautionary rules, as will be seen when we presently state the conditions on which policies are issued.

The societies retain liability to only a small part of each risk they assume, transferring the remainder to various other societies of coinsurance or reinsurance. It should be remembered that coinsurance differs from reinsurance: there is, in the case of coinsurance, no maximum limit of full risk remaining a charge on the first society assuming the risk, and excess profits are divided among several societies. On the other hand the different enterprises which are coinsured share directly the responsibility for meeting claims. Thus each society incurs an obligation to the insured person for the portion of risk it has assumed in coinsurance.

The Development in 1913 *of Insurance against Damage by Aqueducts.*

Societies	Reserve for current risks, end of 1913 (1)	Paid up premiums (2)	Total: columns (1) and (2)	Indemnities paid and to be paid (3)	Provisions and general expenses (4)	Reserve for current risks, end of 1913 (5)	Total: columns (3) (4) and (5)	Profits for the year		Losses of the year	
								Amount	% of premiums	Amount	% of premiums
	Francs	Francs	Francs	Francs	Francs	Francs	Francs	Francs		Francs	
1. Nationale Suisse	4,300.00	12,015.22	16,315.22	3,320.00	4,520.77	5,627.00	13,467.77	2,847.45	23.7	—	—
2. Union Suisse	45,705.40	85,685.19	131,390.59	12,798.61	29,861.78	51,411.00	94,071.39	37,319.20	43.6	—	—
3. Vaterländische Feuer . .	37,495.63	45,043.99	82,539.62	20,106.34	18,663.47	45,044.00	83,813.81	—	—	1,274.19	2.8
4. Aacheuer et Münchener .	304,921.25	408,047.97	712,969.22	103,202.54	192,188.97	312,296.25	607,687.76	105,281.46	25.8	—	—
5. Schlesische Feuer	79,488.56	86,292.46	165,781.02	23,906.62	24,204.01	81,422.64	129,533.27	36,247.75	42.0	—	—
6. Nord-Deutsche	140,147.86	216,337.96	356,485.82	75,664.53	89,819.55	142,272.21	307,756.29	48,729.53	22.5	—	—
7. Gladbacher Feuer	56,491.13	72,422.72	128,913.85	21,132.84	18,951.78	57,409.88	97,494.50	31,419.35	43.4	—	—
8. Frankfurter	452,500.00	566,105.73	1,018,605.73	131,892.52	209,735.69	475,000.00	816,628.21	201,977.52	35.7	—	—
9. Kölnische Glas	31,250.00	61,531.00	92,781.00	15,932.71	20,109.00	31,250.00	67,291.71	25,489.29	41.4	—	—
10. Kölnische Unfall	103,313.97	66,707.80	170,021.77	9,061.76	23,593.43	100,012.67	132,667.86	37,353.91	56.0	—	—
11. Oberrheinische	—	5,893.50	5,893.59	2,793.95	22,206.05	5,893.59	30,893.59	—	—	25,000.00	—
12. Assurance gén. des Eaux.	144,814.60	385,081.97	529,896.57	171,970.55	149,906.93	173,858.40	495,735.88	34,160.69	8.9	—	—
	1,400,428.40	2,011,165.60	3,411,594.00	591,782.97	803,761.43	1,481,497.64	2,877,042.04	560,826,15	—	26,274.19	—
								534,551.96	26.6	—	—

As this table, borrowed from the Federal Office of Superintendence, shows, insurance against the risk of aqueducts in Switzerland represented at the end of 1913 a capital of 122,507,459 francs as against 117,067,055 francs at the end of 1912, giving thus an increase of 5,440,404 francs on the figures of the preceding year, which is 4.6 per cent. of the insured capital at the end of 1912. The paid up premiums amounted to 190,683 francs, as against 176,471 francs in 1912 and 159,863 in 1911. The sum of the claims met also increased, from 34,664 francs in 1911 to 38,519 francs in 1912 and to 48,749 francs in 1913, namely, in relation to the premiums, by 21.7, 21.9 and 23.5 per cent.

It appears finally that in this branch of insurance the insured sums are as a rule relatively small. On the other hand the payment of indemnities is sufficiently complicated ; and hence it arises that the general costs, particularly those of administration and provision, are somewhat high in proportion to the net premiums. In 1913 this proportion averaged 40 per cent, while in 1911 and 1912 it averaged 38.4 and 37.9 per cent., respectively.

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B) *General terms of policies against risk of floods.* — Of the general terms of policies to guard against the risk of floods, kindly communicated to us by the Swiss National Insurance Company of Basle, we will indicate those most interesting to agricultural landowners. We will divide them, as is customary, into three groups, according to whether they refer to the selection of risks, the calculation of premiums or the investigation of losses.

a) *Selection of risks.* — The society insures only against accidents which are immediately and exclusively the result of overflow, this term meaning an exceptional increase of the waters indicated in the policy, such as that produced by rain and thaws, causing these waters to surpass the level fixed in the policy. Loss occasioned by such floods, whether as a consequence of impact, pressure, stagnation of the water or decay of the objects it sweeps away, obstruction, melting of ice, erosion, damp, obstruction by mud or sand, formation of marshes or landslips, is covered by the insurance, as are the risks attaching to the works of salvage or restoring waters to their course which circumstances render necessary. As a precautionary measure a part of the risk, varying in different cases, is always left chargeable to the insured person.

Losses which are the normal result of the water's constant action and can be foreseen, or which are determined by causes independent of floods — as rains, storms, avalanches, earthquakes, and the breaking of dikes or other works regulating the course of a river — are not insured against. Similarly, as is usual in cases of insurance against loss, the insurance does not cover the indirect loss consequent on an accident — such as, for example, a loss of profit on the part of a freehold farmer, the interruption of agriculture, the loss of rents, liability towards third parties, etc. — except where

the policy is issued on especial conditions and fixed additional premiums are paid.

When the contract is concluded the insured person should indicate in writing all circumstances known to him which can affect the risk and determine it. If information thus supplied be afterwards found to be inexact, or given in bad faith or carelessly, the society is not only exonerated from obligation to pay indemnities, but can further retract the contract within a month. While the contract is in force the insured person is also strictly bound to apprise the society of every important change in the nature of the risk.

The society reserves the right to cause at any moment inspections of all real and personal estate exposed to the risk, as well as of the watercourse in question. If the risk be aggravated without any action on the part of the insured person to limit its extent, the society may claim a proportionate increase of the premium or rescind the contract.

Not only a removal of insured property which brings it nearer the water is held to constitute an aggravation of risk, but also every circumstance affecting the course or basin of the water and capable of increasing the danger — as, for example, an important accumulation of sand or transported detritus, the deflection of the river bed, the erosion of land on the river banks, the construction in its vicinity of hydraulic works, a sudden felling of trees, a notable improvement of the soil etc. On the other hand if the risk diminish, the insured person has the right to a fair reduction of his premium.

Preventive measures adapted to a diminution of the losses consequent on floods ought to be taken in good time. The insured person is bound to watch the water course carefully, bearing in mind the facts always officially published with regard to it by the local authorities ; and if a flood occur he should rapidly get in hand the salvage of insured property.

The insurance contract is renewed year by year. In the case of a conveyance of the insured property the rights and obligations created by the insurance contract pass to the conveyee, if he do not within fourteen days of the conveyance repudiate such contract.

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b) *Calculation of premium.*— Premiums and accessory payments must be paid in advance, at the time named in the policy. If the premium be not paid in time the society gives notice in writing to the insured person, and if he do not then fulfil his obligation within fourteen days, his right to an indemnity is interrupted and the society may annul his contract or seek to recover the premium by legal process.

The amount of premiums is calculated with reference to meteorological statistics, to the hydrography of the district and to its condition as regards works of hydraulics and forestry, to the artificial and strengthening works affecting the water course, and to the value of the insured property

and the extent of its liability to such injury as the waters may cause. The insured person may obtain a rebate if he pay his insurance premiums for several years. In 1914 the premiums and net policy dues received by the Swiss National Insurance Company amounted to 3,912.44 francs; the reserves for risks of the previous year, carried over, to 1,054.40 francs; and interest to 32.45 francs. On the other hand reinsurance premiums paid by the society amounted to 749.35 francs; claims met and defalcations on the part of persons reinsuring to 370.36 francs; sums paid to agents to 46.68 francs; general costs to 2.352 francs; the reserve for current risks to 920.20 francs, and the reserve for claims in course of liquidation to 531.25 francs.

c) *Valuation of losses.* — When an accident has occurred the insured person must immediately notify the society by telegram, and afterwards supply it with all information which can allow the cause and the gravity of the loss to be determined.

Since insurance must never enrich the insured person, but merely indemnify him for loss, if the sum for which he has insured prove, at the time of the accident, to be greater than his true loss, the society's obligations are limited to the value lost. On the other hand the society will pay an indemnity proportionate only to the sum for which insurance has been effected, even if it appear, at the time of the accident, that such sum is less than the true loss incurred.

The society is bound to fix the value of the loss incurred as early as possible, taking into fair consideration the multiplicity of subsidies paid if the flood have affected a vast area. The estimate of losses is made :

(1) for real estate — according to the amount of the cost of repair and reconstruction with material similar to that previously employed, loss by wear and tear and increment resulting on maturity being taken into consideration ;

(2) for implements of work, tools and agricultural machinery — according to the amount of the cost of repair or the price of new and identical articles, the normal depreciation of the insured property by time and use being taken into consideration ;

(3) for merchandize and products — according to the amount of costs of production, profits not realized because of the loss of products being left out of account, and the average price of products of the same kind and quality at the same time and place not being exceeded ;

(4) for agricultural products insured by quantity — according to the average yield and prices at the time of harvest, the expenses of harvest being deducted.

If the insured person consider the amount of his indemnity as fixed by the society's expert insufficient, he can ask for a new estimate within fourteen days of the time at which he was informed of the result of the first. The new investigation will be made by three experts, one of them being nominated by the insured person, one by the society and the third by the two others. If the two experts cannot agree on a third, or if the society or the insured persons do not nominate an expert within fourteen

days, the missing expert is chosen by lot, by a notary, from a list of experts supplied by the Swiss Association for Hydraulic Economy and the Basle Chamber of Commerce. In any case no expert may be nominated from the number of any of those who have suffered loss by the flood.

The indemnity is paid within fourteen days of the time at which it is definitely fixed. If the insured person have a right to secure payment for damages from a third party he cedes this right to the society, according to the measure in which it indemnifies him for such damages. If the insured person do not take the necessary action for enforcing this right, or if he render such action difficult, the society is exonerated from obligation to indemnify him for these damages according to the measure in which it might, in the place of the insured person, have enforced this right. These provisions cannot however be applied in cases of loss occasioned by a member of the insured person's own household, or by action for which he is responsible; and it is clear that, since farms give a real livelihood to a certain number of persons living in the same house as the owner, this exception is of particular interest to agriculture. If persons thus situated be responsible for the accident, the society is exempted from obligation to pay the indemnity, unless the terms of the contract contemplate insurance against the especial risk of civil liability towards third parties.

§ 3. Insurance against the accidents of agricultural labour.

The federal law of 13 June 1911 (1) as to insurance against sickness and accidents established, as is well known, compulsory insurance against accidents to workmen and employees belonging to certain industries determined by this law; but did not include among these agricultural labourers, because it was considered that voluntary or optional insurance would better allow the especial conditions of agriculture, with respect to the varying factors in insurance (calculation of premiums, estimate of indemnities etc.), to be taken into account.

Article 115 of the law does indeed provide that whoever is exempt from obligation to insure, and is at least 16 years old, can apply for leave to insure himself against the risk of accidents at the National Institute, if he reside in Switzerland. It is incumbent on the Federal Assembly to fix the conditions of voluntary insurance, and the law adds that in so doing it should take into account the especial conditions of agriculture, principally in relation to the declaration of accidents, preventive measures, insured subventions and the calculation of premiums.

Finally, in consideration of the fact that voluntary insurance implies a sacrifice — an individual effort on the part of the insured person — and deserves therefore to be encouraged, the law declares that the Confederation

(1) Cf. *International Review of Agricultural Economics*, Vol. XVIII, 3rd year, No. 4, April 1912.

will grant a subsidy of one eighth of the total premium (that is for insurance against accidents in the course of employment or otherwise) to every voluntarily insured person whose annual income does not exceed 3,000 francs.

It is very difficult to distinguish exactly between accidents in the course of employment and others. The law determines that all corporal injuries suffered by an insured person shall be considered to belong to the former category if they be incurred (*a*) in the course of work done for the manager of an enterprise brought under insurance or for his mandatories; (*b*) in the course of action taken by the insured person in the direct or indirect interest of such enterprise, and with the presumed consent of the person responsible for it or his mandatories; (*c*) during intervals of work and before and after work, if the insured person by no fault of his own be on the premises of the enterprise or in its workshops or dangerous zone. All other corporal injuries resultant on accidents are considered however not to have been incurred in the course of employment.

The ordinance of the Federal Department of 25 March of this year further defines the scope of the law, establishing by Article 9 " that farms and work auxiliary and accessory to farming, or contributing to the profits of agricultural enterprise or the rural domain, are reserved within the sphere of voluntary insurance.

" This rule is applicable to works executed by a farmer with the aid of his staff or by other agricultural means, even if such works when considered separately fall within the scope of Article 60 of the law. Transport by cart and work connected with wells are cases in point ".

On the other hand according to this ordinance Article 60 affects and compels the insurance of works of construction and making terraces — such as the construction, demolition, alteration, restoration and upkeep of buildings ; the manufacture of building material ; the preparation and technical direction of works of this kind ; every branch of the transport industry ; the working of mines and quarries ; and the extraction of minerals, gravel, sand, etc.

The federal ordinance which determines the scope of the law satisfies the needs of agricultural associations; for it would have been difficult for the law to provide in detail for all the different kinds of voluntary insurance, in order to meet the particular exigencies of agricultural enterprises. It was well that no obstacle was placed in the way of insuring against the accidents of agriculture, and that within this sphere private initiative was allowed play.

* * *

The federal legislation in force distinguishes very properly between works of agriculture, properly so called, and works of forestry in which the risk of accidents is appreciably greater, and which often assume, whether by reason of the various machinery employed or of the particular conditions in which labour is recruited, the character rather of industrial enterprise.

To realize this it is enough to remember the complicated operations implied by regular tree-felling or the clearing away of plants, or the continual labour necessitated by the upkeep of a wood, or the frequent risk of falls from trees or ladders.

However the law of 13 June 1911 did not subject works of forestry to especial rules. It is the law of 18 June 1915, the complement of that of 1911, which by Article 16, line *e*, declares that the Federal Council has the right to compel insurance in the case of works undertaken by public administrative or similar bodies. As appears from a communication kindly made to us by the director of the Swiss Social Insurance Office, the different cantonal governments were invited to express their opinion as to whether it would be opportune also to subject works of forestry to the compulsion to insure, by applying to them Article 16 of the law of 1915. Since most of them gave an opinion in favour of such application the Federal Council established by Article 1906 its ordinance of 25 March of this year, which was promulgated at the instance of the Department of Public Economy, and established that " if a public administrative body cause works of forestry to be carried out, the employees and the labourers employed on these works are insured ".

This provision is consonant with the conditions of the industry of forestry and the tendencies of modern social legislation, which in most European States regulates the organization of insurance against accidents of forestry by especial provisions, differing from those laid down in reference to agricultural enterprise in general.

However, according to the federal ordinance to which we have just referred, if an enterprise of forestry, subject to insurance, comprise works which in no way expose the employees and labourers to the risks against which the enterprise is insured, these works are not covered by the insurance. By the terms of the law as to labour, an enterprise which simultaneously employs insured and non-insured persons must have especial wages lists for the insured.

It is noteworthy that for the purpose of the ordinance every administrative body of the Confederation, the cantons, the districts, the *arrondissements*, the communes, the fractions of communes and the other public corporations (such as, for example, the unions for reafforestation, the agricultural universities or the collective domains) is taken to be a public administrative body.

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The complementary federal law of 18 June 1915 has an interest for agriculture in that it establishes rules for the annulment of insurance contracts previously binding on enterprises now subject to compulsory insurance, and these provisions apply, analogously, when persons voluntarily insured at the National Institute are afterwards subjected to compulsory insurance.

Contracts for insurance against the liability of an employer for accidents and sickness incurred in the course of employment, by his labourers

and employees, are considered to be annulled if it be decided that the enterprise is subject to the rule of compulsory insurance. The annulment has full effect from the day on which such decision becomes definite, but not before the time at which the National Institute for Insurance against Accidents, which has its head quarters at Lucerne, takes action. Rights arisen through accidents which occurred before the day of the annulment are reserved.

The annulment of the contracts imposes no obligation on either contracting party to pay an indemnity. Nevertheless anyone having so stipulated must pay his premiums up to the date of the annulment; premiums paid in advance up to a later date should be returned to the employer, who will give back their amount to his employees and labourers if these have paid in the first instance.

The ordinance further contains especial rules for insuring the regular payment of premiums; and it falls to the Federal Assembly to decide as to the application of these rules to voluntary insurance and the voluntary insurance of outsiders in connection with agriculture. Landowners are often exposed, perhaps more than industrial employers, to claims advanced by outsiders for indemnification of loss, whether because landowners have civil liability for the losses caused by persons living with them or animals belonging to them, or because of the intensification of means of transport even in the country.

In order to ensure, as has been said, the regular payment of premiums, the law prescribes that, on the motion of the National Institute, the president of the Federal Insurance Tribunal declares an action against an employer for the payment of a premium to have succeeded, without giving a hearing to the debtor if (*a*) the competent authority pronounce the enterprise to be subject to compulsory insurance, or such subjection be demanded by the persons interested for reasons mainfestly well founded; (*b*) the relevant decisions have been communicated to the employer in the required form. This declaration having executive force is considered as the definite decision of an authority of the Confederation, in the sense of Article 81 of the federal law of 11 April 1889 on enterprise and bankruptcy. Thus a legal privilege is attached to the credit of premiums owed to the National Institute.

All persons are considered to be insured who are labourers or employees in the service of an enterprise subject to insurance, and who, as an effect of their employment, are connected with its work. Apprentices, voluntary workers and persons practising their trade are considered as labourers. In the case of works of forestry a particular rule can be applied, namely that by which persons taking part in a communal enterprise, contemplated by public law, are considered as employees or labourers if they receive wages for their work from the enterprise.

In relation to agriculture there is, for very simple reasons, another important rule, that contained in Article 25 of the federal ordinance which has been several times cited. This lays down that " the partner of an employer, his parents and others of his family living with him in one house-

hold are not considered to be his employees or labourers unless they receive, for their work in connection with his enterprise, fixed wages in kind, contracted for in advance, and corresponding to such work, according to local customs and natural principles of distribution ".

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Articles 26 to 46 of the federal ordinance of 25 March of this year minutely regulate the procedure of subjecting the various enterprises to compulsory insurance, precisely determining the powers of the Department of Public Economy, the Swiss Social Insurance Office and the National Institute.

In general the obligation to insure is first imposed by the National Institute on receiving notice from the employer, and on the motion of persons jurisdictorily interested in insurance, or simply in right of office. The ordinance contemplates also a collaboration of labourers and authorities, in that it declares that, for the purpose of investigating the character of an enterprise and deciding whether it be obliged to insure, the opinion of its labourers and other employees should whenever possible be heard.

There is appeal against the Institute's decision first to the Swiss Office, then to the Federal Council. One must notice in this connection that as regards the retrospective character of the Institute's decision, the ordinance establishes a distinction between accidents incurred in the course of employment and others. In the case of the former the decision having retrospective effect has efficacy from the moment at which the compulsion to insure is imposed. Its retrospective action is not however effective for more than a year before such compulsion was demanded, before the insured person or his assigns proposed to bring an action for the payment of indemnity, or before the Institute in right of its office proceeded to investigate the obligation of the enterprise to insure. On the other hand in the case of accidents not occurring in the course of employment the decision enforcing insurance cannot have retrospective effect for more than three months before such time.

The employer is obliged to inform his employees and workmen, by a placard or other means, of decisions made by the Institute as regards the application of the ordinance. For the sake of the necessary simplicity it is established that all notifications prescribed by the ordinance are valid when they are sent by registered post. If one of the interested persons have not a known domicile in Switzerland or the territory of the adjacent States the notification concerning him is published in the official Swiss journal of commerce. Prescribed intervals are counted from the day immediately after the registered letter is received or such notice published.

Among the most frequent arguments against the advisability of extending insurance against the risk of accidents to agriculture is that which pleads the heavy burden such action would place on landed property, already weighed down with taxation and exposed to the ever more formid-

able competition of trans-oceanic products. But this general objection is unfounded, since insurance is merely organized thrift and tends only to distribute, among all exposed to the risks, the losses which actually would accrue from the demands for indemnities made in the law courts by victims of accidents, while it effects all possible economies, or has recourse to a special capitalist enterprise, or makes use of a co-operative form of private or public right.

Swiss legislation proceeds, very appropriately, by degrees. If therefore the economic importance of the forests which are public property be considered, as well as the numerous staff employed in them for works of guarding, planting, management, upkeep and utilization of products, the significance is easily understood of the cited recent laws and regulations, which aim at the methodical organization of insurance against accidents and the consequent retention, in increasing measure, of labour on its native soil, by means of the modern expedients of social thrift.

Part III: Credit

UNITED STATES.

PROVIDING CREDIT DURING PRODUCTION

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The question of "providing credit during production" is for the most part a question of farm loans based on personal or collateral security rather than of loans based on farm mortgage security; and likewise it is ordinarily a question of loans for relatively short periods of time — i. e., for periods of less than one year.

The aim of this paper will be, therefore, to indicate the charges paid by farmers for loans on personal or collateral security in various parts of the country, to point out the factors that cause variations in these charges, to show the relations of existing banks to this class of farm loans, and to consider certain improvements that may be suggested in connection with this phase of rural credits.

§ 1. CHARGES PAID BY FARMERS FOR LOANS.

From figures obtained by the Office of Markets and Rural Organization of the United States Department of Agriculture, bearing on charges for farm loans based on personal security, averages by States have been computed as shown in Exhibit No. 1.

TABLE I. — *Loans to Farmers on Personal Security—Average Rates for Interest and for Total Cost.*

(By Geographical Divisions and States).

Geographical division and State	Average interest rate	Average total cost (1)	Geographical division and State	Average interest rate	Average total cost (1)
New England:			South Atlantic-Continued.		
Maine	6.5	7.7	West Virginia	6.2	6.9
New Hampshire	6.0	6.4	North Carolina	6.6	10.2
Vermont	5.9	6.4	South Carolina	8.3	10.5
Massachusetts	6.0	6.5	Georgia	9.6	11.8
Rhode Island	6.1	7.1	Florida	9.2	11.4
Connecticut	5.9	6.2	East South Central:		
Middle Atlantic:			Kentucky	7.3	8.8
New York	5.9	7.0	Tennessee	8.1	9.9
New Jersey	5.8	6.6	Alabama	10.0	12.4
Pennsylvania	5.9	6.9	Mississipi	8.7	10.8
East North Central:			West South Central:		
Ohio	6.4	7.2	Arkansas	9.9	12.4
Indiana	6.9	7.6	Louisiana	9.0	11.1
Illinois	6.6	7.4	Oklahoma	12.5	15.6
Michigan	7.1	9.2	Texas	10.2	12.2
Wisconsin	6.5	7.0	Mountain:		
West North Central:			Montana	11.1	12.1
Minnesota	8.3	9.2	Idaho	10.4	11.5
Iowa	7.5	7.9	Wyoming	10.2	11.0
Missouri	7.7	8.8	Colorado	10.6	11.5
North Dakota	11.0	11.8	New Mexico	11.4	13.8
South Dakota	9.8	10.6	Arizona	10.0	11.1
Nebraska	8.8	9.3	Utah	8.8	10.4
Kansas	7.5	8.8	Pacific,		
South Atlantic:			Washington	9.8	11.4
Delaware	6.0	6.2	Oregon	8.4	9.6
Maryland	6.0	7.0	California	8.4	9.4
Virginia	6.3	8.2			

(1) Average of estimated total cost, including "discounts, bonuses, commissions, and any other extra charges," as reported by correspondents.

It appears that the average total cost on such loans — including interest and all extra charges — ranges from less than 6 ½ per cent. in the New England States to figures between 10 and 15 per cent. or even higher in the Southern and Rocky Mountain States; that in those States of New England where the total cost is lowest — below 6 ½ per cent., — the average extra charge above the nominal rate is only about ½ per cent., and in the more highly developed farming regions of the corn belt, where the total cost ranges between 7 and 8 per cent., the average extra charge is less than 1 per cent. On the other hand, in those States of the South and West that have the highest averages for total cost, the average extra charge often runs as high as 2 ½ and 3 ½ per cent.

In New York and Pennsylvania the average nominal interest rate is less than 6 per cent. and the average total cost is 7 per cent. In Illinois the average nominal rate is 6.6 per cent. and the average total cost 7.4 per cent. In these States, therefore, the average extra charge on personal loans is about 1 per cent. In Iowa and Wisconsin the averages for the extra charge are only four tenths and five tenths per cent., respectively, the nominal rate in Iowa being 7.5 per cent., with an average total cost of 7.9 per cent., and the nominal rate in Wisconsin being 6.5, with an average total cost of 7 per cent. One important factor which undoubtedly should be considered in looking for an explanation of the lower extra charges in Wisconsin and Iowa is the large percentage of loans in these States furnished to the farmer by small local banks, as will be noted later.

In North Carolina the average nominal rate is 6.6 per cent. and in South Carolina 8.3 per cent., showing a difference of 1.7 per cent. The average total cost, however, is nearly the same in these two States, being 10.2 per cent. in North Carolina and 10.5 per cent. in South Carolina. The 6 per cent. legal rate in North Carolina undoubtedly accounts for the low nominal figure reported for that State. Apparently the loan agencies of North Carolina make up in extra charges what they are not permitted to collect as interest.

In Alabama the average nominal rate is 10 per cent. and the average total cost 12.4 per cent. Alabama illustrates a section of the country where credit conditions are partly to be explained by the prevalence of the system of advances to farmers by merchants, under which advancing system perhaps three fourths of the farmers of that State still operate.

Oklahoma appears to have the highest interest charge of any State, the average nominal rate being 12.5 per cent. and the average total cost 15.6 per cent.

Averages for interest charges and total cost have also been computed for subdivisions within States, following the plan of the Bureau of Crop Estimates of dividing each State into nine districts. This makes possible a comparison of loan conditions in the different parts of a given State. In Iowa the district averages for total cost for the three northern districts, reading from west to east, are 7.9, 8.2, and 7.8; for the three central districts 8.2, 7.4, and 7.4; and for the southern districts 8.7, 8.2 and 7.2. It will be seen that in general the lowest averages are found in the eastern

districts, and the highest averages in those furthest west. The widest variation is from 7.2 to 8.7 or 1.5 per cent. as between the south eastern and south western districts. The higher rates of western Iowa conform to the general upward movement in interest charges as one goes from east to west across the country. The apparent exception noted in the north western part of the State, which is tributary to Sioux City, illustrates the tendency toward lower rates in the proximity of financial centres.

In Nebraska the district averages are as follows: in the north (reading from west to east), 10.2, 10.4, and 8.8; in the central districts, 10.6, 8.9 and 8.3; and in the south, 10.4, 9.9, and 8.3. Reading the eastern districts together we have (from north to south) 8.8, 8.3, and 8.3, while the western districts show 10.2, 10.6, and 10.4, the widest variation being from 8.3 to 10.6 or 2.3 per cent. Nebraska illustrates forcibly the effect of climatic conditions, especially rainfall, in relation to farming and to credit conditions. In Minnesota there is a variation in the district averages for total cost from 6.9 per cent. in the south eastern district to 11.4 per cent. in the north central part of the State. Such a comparison indicates clearly the effect of temperature and soil conditions on farming and credit conditions.

The reports on interest rates for each State have also been distributed so as to show the relative number of reports for each rate as indicated in Exhibit 2. This illustrates in another way the degree of variation in interest charges within different States, and also shows in each case the prevailing rate.

TABLE II. — *Short-time loans to farmers on personal security— Per cent. distribution of replies received according to interest rate reported.*

(By Geographical divisions and States).

Geographical division and State	Per cent. of total number of replies showing an interest rate of—								
	5 per cent.	6 per cent.	7 per cent.	8 per cent.	9 per cent.	10 per cent.	11 per cent.	12 per cent.	13 per cent. or over
New England:									
Maine	—	78.3	8.7	8.7	—	2.2	—	2.2	—
New Hampshire	7.1	85.7	7.1	—	—	—	—	—	—
Vermont	10.5	89.5	—	—	—	—	—	—	—
Massachusetts	4.8	90.4	4.8	—	—	—	—	—	—
Rhode Island	—	83.3	16.7	—	—	—	—	—	—
Connecticut	11.8	88.2	—	—	—	—	—	—	—
Middle Atlantic:									
New York	5.1	93.8	1.0	—	—	—	—	—	—
New Jersey	16.7	83.3	—	—	—	—	—	—	—
Pennsylvania	12.8	84.6	1.9	.6	—	—	—	—	—
East North Central:									
Ohio	3.3	61.5	20.3	14.8	—	—	—	—	—
Indiana	4.6	37.6	31.2	26.1	—	.5	—	—	—
Illinois	.6	39.0	57.1	1.6	0.3	1.3	—	—	—
Michigan	.5	24.1	64.5	3.2	—	2.3	0.5	4.1	0.9
Wisconsin	9.2	44.9	28.1	15.7	.5	1.6	—	—	—
West North Central:									
Minnesota	.5	8.7	13.5	41.8	6.2	28.4	—	1.0	—
Iowa	.4	8.2	28.0	63.4	—	—	—	—	—
Missouri	.3	11.0	20.8	63.4	.3	2.7	—	1.5	—
North Dakota	—	—	1.8	5.7	1.7	29.5	4.0	57.3	—
South Dakota	—	—	1.6	29.6	3.2	43 6	2.7	18.3	1.0
Nebraska	.4	1.8	8.2	40.7	5.0	42.9	.4	.4	.4
Kansas	.4	1.4	6.0	66.5	4.9	19.7	.4	.7	—
South Atlantic:									
Delaware	—	100.0	—	—	—	—	—	—	—
Maryland	2.9	94.3	—	2.9	—	—	—	—	—
Virginia	.8	82.6	4.1	9.9	.8	1.7	—	—	—
West Virginia	—	90.2	2.0	5.9	—	—	—	2.0	—
North Carolina	—	75.7	4.7	14.8	.7	2.0	1.4	—	.7
South Carolina	—	—	3.0	82.8	4.0	7.1	—	3.0	—
Georgia	—	.7	5.1	51.1	2.9	18.2	1.5	11.7	8.8
Florida	—	—	—	38.6	9.1	47.7	2.3	2.3	—
East South Central:									
Kentucky	—	45.0	7.1	34.3	1.2	11.8	—	.6	—
Tennessee	—	27.9	4.1	36.0	2.3	26.7	.6	—	2.3
Alabama	—	2.1	1.4	36.5	—	33.8	.7	17.2	8.3
Mississippi	—	4.0	4.0	61.1	2.0	26.2	—	—	2.7
West South Central:									
Arkansas	—	—	—	7.2	5.	90.2	1.0	—	1.0
Louisiana	—	1.3	1.3	56.0	4.0	29.4	—	5.4	2.7
Oklahoma	—	.04	—	4.4	.4	44.9	2.2	19.4	28.2
Texas	—	—	2.3	12.1	2.0	69.9	.8	6.6	6.3

TABLE II. — *Short-time loans to farmers on personal security—Per cent. distribution of replies received according to interest rate reported.* (Cont.).

(By Geographical divisions and States).

Geographical division and State	Per cent. of total number of replies showing an interest rate of—								
	5 per cent.	6 per cent.	7 per cent.	8 per cent.	9 per cent.	10 per cent.	11 per cent.	12 per cent.	13 per cent. or over
Mountain:									
Montana.	—	—	—	2.7	—	37.3	1.3	58.7	—
Idaho	—	—	1.3	3.8	1.3	64.6	8.9	20.8	—
Wyoming	—	—	2.1	12.8	2.1	55.3	10.6	12.8	4.2
Colorado.	—	—	1.9	12.3	2.8	42.4	5.7	29.2	5.5
New Mexico . . .	—	—	—	4.3	—	31.9	8.5	48.9	6.4
Arizona	—	—	—	30.8	—	30.8	15.4	23.1	—
Utah	—	—	6.3	50.0	12.5	25.0	—	6.3	—
Pacific:									
Washington . . .	—	—	2.5	29.6	—	42.0	3.7	21.0	1.2
Oregon	—	4.0	8.0	57.3	1.3	29.3	—	—	—
California	—	5.0	17.7	42.6	9.9	17.7	—	7.1	—

§ 2. FACTORS WHICH CAUSE VARIATIONS IN INTEREST CHARGES.

Let us now consider the more important factors which cause variations in interest charges, especially as between different localities or regions of the country.

These may be summarized as follows :

1) climatic and soil conditions;
2) character of farming and farm population;
3) distance from financial centres;
4) character of accessible financial agencies.

The effect of climatic conditions on interest rates is illustrated by the figures already shown for eastern and western Nebraska. The contrasts noted within that State apply generally as between the sections of the corn belt having relatively adequate rainfall, and the semi-arid country further west. The effect of differences in temperature and soil conditions on interest rates is shown in the comparison made between south eastern and north central Minnesota.

There is no factor affecting interest charges on farm loans which is of

greater importance than the character of the farming and farm population. The best credit will always be extended to those farming regions where the farmers are known to meet their obligations regularly and promptly. This means that the advantages will rest with agricultural areas where the character of the population is well established and where a regular farm income is assured from year to year. Preference will therefore be given to areas of a fairly stable as against a shifting or migratory population, since the dependability of borrowers can be most satisfactorily determined through experience and personal connections of long standing. Preference will also be given to areas of diversified agriculture as against one-crop territory, giving the "feed-food-and-cotton-farmer" an advantage over the one crop cotton farmer, and favouring the mixed grain and live stock farmer generally as against the wheat or other single grain crop farmer. Too much emphasis cannot be laid on the character of the farming population and on the importance of approved systems and methods of farming, yielding dependable incomes, as a necessary basis for favourable credit conditions, whether for personal or mortgage credit.

Distance from financial centres clearly affects charges on farm loans. The figures for interest rates show a definite upward tendency as one proceeds outward from any of the important financial centres. How to overcome in some measure the handicap that mere geographical distance thus imposes upon the more remote farming areas of our country is one of the most difficult problems in rural credits.

§ 3. Relations of existing banks to farm loans.

Another factor of far-reaching importance in its relation to the charges made on farm loans is the character of financial agencies supplying such loans. Let us note especially the part played by existing banks in this connection. Exhibit No. 3 shows the estimated total short time loans supplied to farmers in each State by existing banks; and also the amounts furnished by national banks and by banks other than national.

TABLE III. — *Short Time Loans to Farmers Made by Banks.*

(By Geographical Divisions and States).

Geographical division and State.	Estimated total amount (thousands of dollars).			Per cent. of loans made by—	
	All banks.	National banks.	Other banks.	National banks.	Other banks.
United States	1,609,970	765,290	844,680	47.5	52.5
Geographical divisions:					
New England	16,890	8,500	8,390	50.3	49.7
Middle Atlantic	67,400	47,770	19,630	70.9	29.1
East North Central	325,030	141,270	183,820	43.4	56.6
West North Central	588,120	246,690	341,430	41.9	58.1
South Atlantic	151,220	47,150	104,070	31.2	68.8
East South Central	76,530	30,089	46,450	39.3	60.7
West South Central	204,310	137,700	66,610	67.4	32.6
Mountain	86,650	52,270	34,380	60.3	39.7
Pacific	93,820	53,920	39,900	57.5	42.5
New England:					
Maine	5,000	860	4,140	17.2	82.8
New Hampshire	1,050	690	360	65.7	34.3
Vermont	7,010	3,360	3,650	47.9	52.1
Massachusetts	2,370	2,280	90	96.2	3.8
Rhode Island	80	10	70	12.5	87.5
Connecticut	1,380	1,300	80	94.2	5.8
Middle Atlantic:					
New York	23,990	17,750	6,240	74.0	26.0
New Jersey	7,480	6,240	1,240	83.4	16.6
Pennsylvania	35,930	23,780	12,150	66.2	33.8
East North Central:					
Ohio	46,600	22,130	21,470	50.8	49.2
Indiana	64,930	29,050	35,880	44.7	55.3
Illinois	138,140	72,560	65,580	52.5	47.5
Michigan	33,580	7,590	25,990	22.6	77.4
Wisconsin	44,780	9,880	34,900	22.1	77.9
West North Central:					
Minnesota	79,120	32,480	46,640	41.1	58.9
Iowa	187,070	72,230	114,840	38.6	61.4
Missouri	67,040	18,610	48,430	27.8	72.2
North Dakota	46,070	23,340	22,730	50.7	49.3
South Dakota	40,480	14,260	26,220	35.2	64.8

TABLE III. — *Short Time Loans to Farmers Made by Banks.* (Continued).

(By Geographical Divisions and States).

Geographical division and State.	Estimated total amount (thousands of dollars).			Per cent. of loans made by—	
	All banks	National banks.	Other banks.	National banks.	Other banks
Nebraska	85,600	47,990	37,610	56.1	43.9
Kansas	82,740	37,780	44,960	45.7	54.3
South Atlantic:					
Delaware	6,260	1,450	4,810	23.2	76.8
Maryland	18,470	6,440	12,030	34.9	65.1
Virginia	29,770	14,220	15,550	47.8	52.2
West Virginia	8,310	1,990	6,320	23.9	76.1
North Carolina	21,280	8,900	12,380	41.8	58.2
South Carolina	19,890	5,500	14,390	27.7	72.3
Georgia	41,430	7,080	34,350	17.1	82.9
Florida	5,810	1,570	4,240	27.0	73.0
East South Central:					
Kentucky	29,200	16,940	12,260	58.0	42.0
Tennessee	23,560	5,710	17,850	24.2	75.8
Alabama	15,250	5,240	10,010	34.4	65.6
Mississippi	8,520	2,190	6,330	25.7	74.3
West South Central:					
Arkansas	10,960	3,890	7,070	35.5	64.5
Louisiana	12,360	4,010	8,350	32.4	67.6
Oklahoma	51,260	33,250	18,010	64.9	35.1
Texas	129,730	96,550	33,180	74.4	25.6
Mountain:					
Montana	20,300	8,640	11,660	42.6	57.4
Idaho	13,290	7,090	6,200	53.3	46.7
Wyoming	10,010	8,400	1,610	83.9	16.1
Colorado	19,910	13,880	6,030	69.7	30.3
New Mexico	4,500	3,820	680	84.9	15.1
Arizona	6,350	2,400	3,950	37.8	62.2
Utah	7,010	5,000	1,920	72.6	27.4
Nevada	5,280	2,950	2,330	55.9	44.1
Pacific:					
Washington	24,510	7,800	16,710	31.8	68.2
Oregon	17,020	8,370	8,650	49.2	50.8
California	52,290	37,750	14,540	72.2	27.8

It appears that the banks of the United States furnish approximately $1, 610,000,000 in short time loans to farmers, of which national banks supply $765,000,000 and banks other than national (State, private, and savings banks, and trust companies) about $845,000,000. This means that our 7,420 national banks furnish 47 ½ per cent. and our 18,456 other banks supply 52 ½ per cent. of the total short time bank loans to farmers.

The relative importance of national banks as compared with others in relation to short time farm loans varies considerably in different parts of the country. In New York national banks furnish almost three fourths of the total short time farm loans from the banks in the State, while other banks supply a trifle more than one fourth. Similarly, in Pennsylvania two thirds of the farm loans on personal or collateral security are made by national banks and one third by other banks.

On the other hand, in Wisconsin only 22 per cent. of the farm loans from banks are supplied by national banks and 78 per cent. by other banks. In Michigan, less than 23 per cent. are lent by national banks and more than 77 per cent. by other banks. In Missouri less than 28 per cent. of these farm loans are furnished by national banks and more than 72 per cent. by other banks. In Minnesota, national banks supply 41 per cent. while other banks furnish 59 per cent. of these loans to farmers. In Iowa less than 39 per cent. of the bank loans to farmers on personal or collateral security are made by national banks, more than 61 per cent. being supplied by banks other than national.

The Iowa banks supply farmers with short time loans amounting to more than $187,000,000, this amount exceeding by a considerable sum that supplied by the banks of any other State.

Iowa is fairly honeycombed with relatively small stock savings banks, the State law authorizing such banks to be incorporated with a capital of $10,000. These stock savings banks furnish fully one third of the total short time banks loans of the State made to farmers.

In typical States of the old cotton belt we find that by far the largest portion of short time farm loans is made by banks other than national. Thus in South Carolina over 72 per cent. of such loans are made by banks other than national and less than 28 per cent. by national banks. In Georgia almost 83 per cent. of the loans are made by banks other than national and about 17 per cent. by national banks. In the States of Tennessee and Mississippi, national banks supply only about one fourth while other banks furnish three fourths of such loans. In Alabama and Louisiana national banks furnish less than one third and other banks fully two thirds of such loans. On the other hand, in Oklahoma the national banks furnish almost two thirds, and other banks one third, of such loans, while in Texas national banks supply three fourths of these short time farm loans and other banks about one fourth. In nearly all the Rocky Mountain States the relative importance of national banks is considerably greater than that of other banks. In Utah, 73 per cent. of the loans are from national banks and 27 per cent. from other banks. In Colorado 70 per cent.

are from national banks and 30 per cent. from other banks. In Wyoming 84 per cent. are from national banks and 16 per cent. are from other banks.

In general, our data point to the conclusion that in the older cotton growing States, as well as in the grain growing sections of the country, a considerably larger portion of the loans furnished to farmers during the period of production are supplied by State, private and savings banks and trust companies, than by national banks, while on the other hand in the cattle territory, including Oklahoma, Texas and the Rocky Mountain States, by far the larger portion of the bank loans are furnished by national banks. They also show that for the country as a whole a larger portion of the loans on personal or collateral security are furnished by State, private, and savings banks, and trust companies than by national banks.

§ 4. Improvements suggested.

The charges on short time loans to farmers, as cited in the earlier part of this paper, clearly indicate the need for improvement, especially in the South and West. There are the sections where local capital is relatively scarce and where there is the greatest need of connecting the farmer with outside or distant sources of capital. Improvement in loan facilities, therefore, should include proper encouragement for the creation of institutions for the accumulation of local savings. And it should also include a better means of contact between the farmer and outside or distant sources of capital.

Our Federal reserve system will undoubtedly serve as an important step in connecting farmers with outside capital, especially because of the opportunity afforded for the discounting of agricultural paper. At the same time, it is clear from the study of present sources of short time loans to farmers that a large portion of our farming population is not in a position at present to take advantage of the Federal reserve system. It seems especially important that the benefits of the discount feature of the Federal reserve banks should be so extended as to be within reach of farmers near towns and villages where no national banks can now be profitably organized. Unless other smaller banks can be induced to come into the Federal reserve system, it may be found advisable to permit national banks to create branches, without capital stock, in the smaller towns and villages.

The encouragement of suitable savings institutions for the better accumulation of local capital might well be left to the several States. Apart from a proper adaptation of such local savings banks as are now found in large numbers in certain regions, especially in Iowa and New England, it would seem that each State should provide a law permitting the organization of co-operative credit associations.

Thus far credit union laws been enacted in seven States, as follows: Massachusetts (1909), Texas (1913), Wisconsin (1913), New York (amended

1914), North Carolina (1915), South Carolina (1915), Oregon (1915), and Utah (1915). These associations are designated " Co-operative Credit Associations " in Wisconsin, and " Credit Unions " in the other six States.

Twenty-six credit unions have been organized under the statute of Massachusetts. These, however, are nearly all found among the working classes in towns or cities. Only one credit union has been organized among farmers in Massachusetts. The Jewish Agricultural and Industrial Aid Society has organized 18 credit unions in this country, including eight in New York, five in New Jersey, four in Connecticut, and one in Massachusetts. This society is attempting to have its associations in New York reorganized under the amended law of that State. I have no knowledge of any credit associations organized in Texas, Wisconsin, Oregon, North Carolina or South Carolina.

In formulating a State law with reference to co-operative credit associations, it appears that existing statutes for such States as Massachusetts, New York, Texas, Wisconsin, Oregon, North and South Carolina could all be modified to advantage in order to meet the needs of rural conditions. While most of these statutes have been framed with the apparent intention of serving the needs of rural personal credit, they have all been patterned in the main on the Massachusetts law, and are better suited to the needs of the working classes in towns or cities than they are to the needs of farmers.

In the existing statutes there are three requirements, especially, which could be modified to advantage :

1) all of these laws make it necessary to organize the local associations with capital stock ;

2) the placing of deposits with associations is limited to members ;

3) the funds of the associations are restricted to individual loans.

It would seem that the three provisions above mentioned should be modified as follows :

1) co-operative credit associations should be allowed to organize either with or without capital stock ;

2) such associations should be permitted to receive deposits from anybody, whether a member or not ;

3) the associations should be allowed to employ their funds collectively for common agricultural needs such as collective purchasing.

It is believed that farmers in certain localities could be induced to organize co-operative credit associations on the strength of such liability as they would be willing to assume, without contributing anything for capital stock. Among workers in cities who receive wages periodically, the plan of having shares of stock presents no hardship or handicap. Among farmers whose income is seasonal and whose interest in organizing is mainly that of borrowers, associations without capital stock might serve the purpose better.

There appears to be no reason why the right to deposit with such an association should be restricted to members. There might be in a given neighbourhood a number of people who would be willing to deposit funds

with such an association, but who had no special reason to become members of the association. If co-operative credit associations are to succeed they should have the advantage of all the deposits which they can obtain.

The importance of allowing a co-operative credit association to use its funds for common agricultural needs as well as for loans to individual members cannot be over emphasized. There are many ways in which an association as such might use its funds collectively for common agricultural purposes, as illustrated in the case of collective purchasing. The statute should therefore be so drawn up as to permit an association to use its funds in this way if it desire to do so, as well as to make loans to individual members.

Whenever borrowers desire to form guarantee associations to endorse the loans of members, proper encouragement should be given for this purpose. Such associations might prefer to omit the deposit feature noted above, but be similar in other respects to co-operative credit associations.

There is other desirable legislation of great importance to the farmer which would directly affect his means of obtaining credit. Examples of this are found in such laws as would have a bearing on the standardization of grain and cotton, the warehousing of these products and the encouragement of uniformity in warehouse receipts. All such matters are important in determining how far the farmer can utilize his products to advantage as a collateral for loans.

Apart from improvement in financial agencies, whether under State or Federal law, and apart from other legislation affecting opportunities for farm credit, it should be remembered that anything tending to improve the status of the farmer and his farming is of vital importance in its relation to rural credits. We need to keep clearly in mind in all rural credit discussions that a stable system and method of farming is a necessary basis for favourable credit conditions; and that the personal character and business ability of the farmer himself, as well as his method and system of farming must necessarily be considered. In fact, everything that leads to better farming will also be helpful in improving farm credit. This means that all the work of the various experiment stations, State departments of agriculture, agricultural schools and colleges, and of the United States Department of Agriculture, should contribute at least indirectly, towards the betterment of rural credits.

BRITISH WEST INDIES.

AGRICULTURAL CREDIT IN THE BRITISH WEST INDIES. (1)

Introduction.

Provision has been made by the government for agricultural credit in four islands of the British West Indies, namely, Jamaica, Trinidad, St. Vincent and St. Lucia. In Jamaica the facilities differ from those provided in the other three islands and the facilities have been in existence for a somewhat longer period. Briefly the system in Jamaica empowers the government to advance money to agricultural loan societies, which are conducted on a basis of limited liability; the system is essentially a relief system, designed to help the small landowner at the time of natural disasters such as hurricanes, floods and earthquakes. In Trinidad, St. Vincent and St. Lucia legislation has been passed to assist the small landowner on the Raiffeisen system of mutual liability. This legislation and its operation present features of considerable interest, being the first of their kind to be introduced under British colonial conditions in the tropics.

§ 1. Co-operative credit in Jamaica.

The first bank formed in Jamaica was the Christiana Bank Ltd. which was started in May 1905 by a number of private individuals. This establishment was described in April 1911 as having been increasingly useful and it was urged that the branch agricultural societies in other districts in Jamaica should help to start institutions of a similar kind. The working capital of this bank is raised entirely by shares (£5 each) which are not withdrawable but transferable to another shareholder with the sanction of the board of management. The shares may be paid up at once or by 2s. monthly instalments. The interest charged on loans, which are made for six months

(1) Written from information in the files of the Imperial Department of Agriculture for the West Indies by direction of the Imperial Commissioner, by W. R. Dunlop, Scientific Assistant.

only, is at the rate of 10 per cent. per annum and no security is required beyond two signatures to the borrower's promissory note; but sureties are given to understand that if the loan is not repaid they will be sued. A lawyer is retained by the bank for this purpose. The loans issued generally vary between £1 and £20.

The bank is not in any way connected with the Jamaica Agricultural Society but may be regarded as one of the results of the activities of that institution. One of the strictest rules of the bank is that no loan shall be made for any other than agricultural purposes.

The successful working of the Christiana Bank and the unfortunate experiences of Jamaica in relation to climatic extremes and other natural disasters led the government to pass, in May 1912, the Loan Banks Law (No. 6 of 1912). This ordinance makes it lawful for the governor to appoint an Agricultural Loan Societies Board with power to enquire into the proceedings of all agricultural loan societies which may apply to the government for loans which are issued from funds voted by the Legislative Council. Under this Act, the government can advance a local loan bank, duly organized, up to two thirds of its share capital without the shares being actually paid up in cash by the members.

In December 1912 the widespread damage occasioned by the storms of that year led the government to amend the first law and pass a fresh one entitled the Agricultural Societies (Special Loans) Law. By this enactment, so long as local loan banks are organized, they may make loans to freeholders (and under certain circumstances to tenants of land) who must first become members of the local bank, and make their repayments, which may be spread over two years, or may be paid in a lump sum at the end of two, into the local bank. When the shares are paid, the total amount becomes the capital of the bank and is available for future loans in the ordinary way of loan banks, independently of government aid. The interest charged by the government to the loan bank is fixed at 4 per cent.; the interest charged by the local bank to borrowers is 6 per cent.; the difference being required for the working expense of the local bank, and any balance going to the reserve fund.

The establishment of banks has naturally been stimulated by this Act, and by the middle of 1913 they had been instituted in nearly every parish.

§ 2. Co-operative credit in St. Vincent, St. Lucia and Trinidad.

Although there has, for many years, been a great deal of public discussion concerning the desirability of establishing co-operative credit banks, especially in Trinidad, it was not until 1913 that a definite move was made to do anything. In that year the administrator of St. Vincent introduced into that colony an Act (described later) for the registration, encouragement and assistance of agricultural credit societies. This empowered the government to make loans to properly registered societies constituted on the Raiffeisen system of unlimited liability.

At the present time there are twelve societies working successfully in St. Vincent under this Act.

This piece of legislation was to some extent in the nature of an experiment and the results were closely watched by other West Indian colonies. In 1915, the government of Trinidad passed a similar ordinance and on his promotion to St. Lucia the late administrator of St. Vincent introduced in the same year a similar ordinance for St. Lucia.

In the cases of Trinidad and St. Lucia it is yet too early to make any statement as to the success which may result. With regard to St. Vincent it must be remembered that the conditions for establishing banks were about as ideal as could be found in the West Indies. There exist in this island land settlements worked by a comparatively sophisticated class of peasant proprietors who appreciate the principles of co-operative action and with whom the government agricultural department is in close contact. In Trinidad and to some extent also in St. Lucia conditions are different; there is a different class of peasant, and the system of land settlement and governemental direction of peasant agriculture is not as fully developed. There is no reason, however, why the movement should not be successful in these islands so long as attempts are not made to push things too quickly.

In the following section an account is given of the provisions of the ordinances operating at the present time in St. Vincent, Trinidad and St. Lucia.

§ 3. Agricultural credit societies' ordinances.

The agricultural credit societies' ordinances operating in St. Vincent, Trinidad and St. Lucia are practically identical. As previously stated the Trinidad and St. Lucia Acts were modelled on the St. Vincent one.

Taking the Trinidad Act: this is defined as an ordinance for the registration, encouragement and assistance of agricultural credit societies. The registrar of credit societies under this ordinance is the Director of Agriculture who may utilize the services of officers of his department in carrying out the duties imposed upon him and may appoint one officer to be inspector of all credit societies registered under the ordinance.

As regards the constitution of credit societies, any society desiring to be registered shall, through its secretary, make application to the registrar in writing and supply him with: (*a*) the name and office or place of business of the credit society: (*b*) the names and addresses of all members of the committee thereof; (*c*) the names and addresses of the secretary, treasurer and trustees thereof; (*d*) the names and addresses of all members thereof. The fee for resgistration is one dollar (4*s*. 2*d*.).

Before registering any credit society, the registrar is required to make enquiries (defined by schedule) with the object of satisfying himself that the officers of the society are fit and proper persons.

As regards number of members, no society may be registered which consists of less than twelve or more than fifty members, unless the registrar shall, in certain cases, permit a larger membership.

On registration the secretary of the society receives a certificate to that effect. The registrar is not bound to give any reason for refusal to register a society; but an appeal may be made to the Governor-in-Executive Council, whose decision shall be final.

The governor may cancel a registration, but notice must first be given to the society. Cancellation does not affect the outstanding liabilities of the society.

The registrar is required to keep a book showing the names and addresses of the officials and members of each society. The secretary of each society is bound under a penalty of 40s. to keep the registrar informed of any changes in the place of business or in the names and addresses of the officers and members, or of their death or withdrawal.

Any credit society may sue or be sued in the courts of the colony in the name of the trustees.

In regard to loans, the ordinance lays down that there shall be a board of management consisting of the Receiver-General who shall be chairman, of the registrar and of the Crown Solicitor, which board may out of such moneys as the Legislative Council provide, make advances by way of loan to any registered society applying for the same.

The amount of a loan to any one society may be at the discretion of the board of management but shall not be larger than in the proportion of £10 to every member of the credit society.

All loans shall be for not less than twelve months and may be subject to renewal.

The board of management has power to call in a loan and to take action on non-payment.

All loans bear interest at such rate, payable half-yearly, as the Governor-in-Executive Council may from time to time decide.

All loans shall be made on the joint and several liability of the trustees and every member of the credit society.

The law makes it an offence for a society which has contracted a government loan to borrow from private sources without first having obtained the permission of the board of management.

Contravention of this provision renders the offender liable to a penalty not exceeding £20.

Loans obtained by government permission from private sources are not subject to the clauses relating to amount and interest; but the society's liability is unlimited.

It is provided by the ordinance that government loans must be applied to agricultural purposes only. Any member knowingly contravening this provision is liable to a fine not exceeding £20.

The registrar has to be notified of details of loans and of their discharge. Failure to observe this clause renders the committee of a society liable to a fine not exceeding £5.

Finally the general clauses empower the warden in each ward (or district) of the island to investigate and report on the working of any society if requested to do so by the registrar: and require an annual report by the Auditor-General on the financial position of the societies and their methods of conducting business. The Governor-in-Executive Council may make afresh or amend existing regulations under the ordinance. It is provided that no fees shall be charged in executing provisions in pursuance of the ordinance.

§ 4. Points in which the Trinidad, St. Vincent and St. Lucia ordinances differ.

It may be of interest to indicate the principal points on which the three ordinances differ.

(1) Registrar. — Under the Trinidad ordinance the registrar is the Director of Agriculture. In St. Vincent and St. Lucia the Registrar of the Supreme Court of Judicature performs the duties of registrar. The inspector in St. Vincent does not, as in Trinidad, belong to the agricultural department.

(2) Limitation of Membership. — In the St. Vincent ordinance the minimum number of members only is limited. In the case of Trinidad and St. Lucia power is further provided for restricting the maximum.

(3) Board of Management. — In the cases of St. Vincent and St. Lucia this consists of the Governor in Council; in Trinidad of the Receiver General, the registrar and the Crown Solicitor.

(4) Size of Loans. — By the St. Lucia ordinance the government may make loans provided the loans to the societies in the aggregate do not exceed £3,000. In the St. Vincent Act the limit prescribed is £500. Further, the amount of the loan to any one society in proportion to every member is £6 in the case of St. Lucia while it is £5 in the case of St. Vincent though the Governor in Council may when he thinks fit make a loan in a proportion larger than £6 to every member of a St. Lucia society. In Trinidad no limit is definitely prescribed as to the total amount that may be lent, but it shall not be larger than in the proportion of £10 to every member of any society.

(5) Interest. — In the cases of St. Vincent and St. Lucia the interest on the government loans is fixed at 6 per cent. In Trinidad rate of interest is fixed from time to time by the Governor-in-Executive Council.

§ 5. Credit in other parts of the West Indies.

British Guiana. In this colony there is a Co-operative Credit Banks Ordinance (No. 9, 1914-15). Its objects are as follows:

To provide for the granting of State aid to co-operative credit banks and for the proper supervision of the same by a central committee. The

end aimed at is the promotion of thrift and united action among the agricultural population of the colony and the furtherance of agricultural prosperity.

Barbados. In 1907, the Barbados Sugar-Industry Agricultural Bank was established. This institution had for its object the administration of the free grant of £80,000 made in aid of the sugar industry of the island by the Imperial Parliament. Loans, which can only be expended in connection with the cultivation and management of the estate (except with the express permisssion of the directors) are made to planters at 6 per cent. interest, on the security of the growing crops. Although the fund originally granted was in aid of the sugar industry, it was afterwards extended to include cotton.

This bank has been worked with a marked degree of success and its operations have been of considerable service to the sugar industry of the colony.

MISCELLANEOUS INFORMATION RELATIVE TO CREDIT IN VARIOUS COUNTRIES.

ITALY.

RECENT MEASURES IN FAVOUR OF AGRICULTURAL CREDIT AND AGRICULTURE IN THE SOUTH. — *Gazzetta ufficiale del Regno d'Italia*, No. 182, Rome, 3 August 1916.

In order to help the agriculturists of the provinces of Foggia, Bari, Campobasso and Potenza to overcome difficulties which are the consequence of three years of defective harvests, and of an invasion of voles which at present cause grave damage in these regions, measures important to agricultural credit and agriculture in the south were recently enacted by Decree No. 913 of the General Lieutenancy of the kingdom, dated 27 July 1916. The most noteworthy of them are those which tend to make it easy for agriculturists to discharge their debts to agricultural credit establishments and institutions, in that they permit such discharge to be gradual if all necessary precautions be taken. Thus it is established that if there be no harvest in 1916 the debtor will be able to ask such institutions to divide the amount of the debt he has contracted in previous years, and of deferred interest on it at the rate of 4 per cent. into five sums which shall form annual payments. The first of these shall be a burden on his harvest of 1917 and shall consist of one tenth of the total sum due, and each of his four ensuing annual payments shall amount to a quarter of the remaining nine tenths.

With the same object steps have been taken to form commissions of arbitration in each *mandamento* of the affected zones. They are constituted by landowners and farmers and presided over by the lender ; and it is their duty to come to an agreement as to equitable reductions to be made on instalments of rent due for a whole lease, and to distribute into a certain fixed number of instalments the balance of what is owed by the farmers.

Reductions of the land tax are also granted, proportionately to the diminution of income suffered as result of the destruction of harvests ; and payments due for redemption of loans contracted with the land credit institutions are deferred.

Further in order to ensure, in the interests of national economy, preparation for the new harvest, the decree provides for a considerable increase of the resources of provincial agricultural credit banks, by placing at their disposal a sum of ten million liras. This will be used to make advances at the rate of 2 per cent. interest, and is intended to secure the purchase

of seeds and food for live stock and to cover the costs of farming. The seeds will be advanced in kind and distributed by the *Consorzi granari provinciali*, their good quality being thus ensured. Severe penalties attach to any use of them other than that for which they are granted.

The advances may be made :

a) to freeholders or leaseholders who themselves farm the land they hold and have a taxable income of not more than 5000 liras ;

b) to anyone cultivating and occupying a piece of land, whatever be the contract in right of which he occupies it.

These advances, whether they be in the form of seeds, food for live stock or other agricultural commodity, or whether they be of money to pay the costs of farming, may not be of greater value than 200 liras for every hectare of the borrower's land which is to be sown. They will be made to applicants directly, whenever for any reason they cannot be made through intermediary institutions. With the same aim, that of stimulating farming activity and improving agriculture, certain special measures have been decided on which will hasten the accomplishment of projected works of irrigation, and will facilitate the purchase of such machines as motor waggons.

MEXICO.

AGRICULTURAL CREDIT IN MEXICO. — *El Constitucionalista*, No. 170, 26 May 1916, and *Diario oficial*, No. 14, 3 July 1916, and No. 61, 26 August 1916.

The efforts of the Mexican government, in the first years of the twentieth century, to develop the cultivation of cotton gave such satisfactory results that in 1909-10 the area on which cotton was grown measured 115,082 hectares (1). It is true that in the following year this area was reduced to 83,162 hectares. We have no statistical data of later date ; but since the public authority has recently judged it opportune to take measures to encourage cotton growing, we may presume that the difficult state of the cotton market and the internal condition of the country have not been without unfavourable influence on the normal development of this branch of agriculture which began so auspiciously.

A decree of 23 May 1915 constituted in Torreón in the State of Coahuila, as a centre for cotton production, an especial credit commission called " Comisión Refaccionaria de la Laguna ". This aims at helping producers of cotton and maize in the current year, within the vast district of Laguna, by providing them with the credit necessary for the cultivation of their lands. The commission is composed of five members, of whom two are nominated by the Secretary of Finances and the other three by landowning or tenant farmers holding more than five lots of land.

(1) See *International Review of Agricultural Economics*, 5th year, No. 5, May 1914.

The loans it will grant will be taken from a fund of 25 million pesos constituted for such end.

Agriculturists or agricultural enterprises obtaining loans will be bound to repay the sum they borrow on fixed terms, and will moreover be liable for 20 per cent. of such sum if the commission suffer loss by its transactions of this year.

The interest on loans cannot surpass the maximum of 10 per cent. a year.

The commission will depend directly on the Secretariat of Finances; it will constitute a legal corporation, capable of being sued and of entering into contracts with agriculturists.

Part of the fund of 25 million pesos for making loans will be provided according to the terms of a decree of 24 June, by a tax on the cotton produced in Laguna, which may be sold freely (although last year the authorities requisitioned the cotton harvest) in return for the payment of a due of 10 pesos of national gold on a bale of 230 kilos in the three qualities of cotton, and of 4 pesos on the fluff. These dues are rendered to the commission which will place an especial mark on bales on which the tax has been paid. All producers, keepers of depositories or detainers should inform the commissioners of the quantity of cotton they have in warehouse, as well as of that which they expect to pick in the rest of the year.

On 19 August of this year the Mexican government instituted by decree another and similar agency for the State of Colima — " Comisión Refaccionaria de Colima " — in order to encourage the development of agriculture in general. This commission is like the first composed of five members, of whom two are nominated by the large and the small farmers of the State, two by the government of the State and one by the federal government.

The sum placed at the disposal of this commission amounts to 500,000 pesos.

The maximum term for which loans may be made is two years and interest on them may not surpass 10 per cent.

RUSSIA.

THE ACTIVITIES OF MORTGAGE CREDIT ESTABLISHMENTS IN RUSSIA IN 1915. — Вѣстникъ Финансовъ, Промышленности и Торговли, (*Messenger of Finance, Industry and Commerce*) No. 35, 28 August-10 September, 1916.

According to data supplied by the *Statistique du crédit à long terme en Russie*, the activities of the mortgage banks in 1915 are represented by the following figures, in terms of millions of roubles :

Names of banks	Titles to Land Mortgage Bonds 1 Jan. 1914	1 Jan. 1915	±
I. *State Banks*			
a) Bank of Land Credit of the Nobility	910.8	924.3	+ 13.5
b) Bank of Agricultural Credit of the Peasants	1,332.9	1,353.0	+ 20.1
c) Credit Bank of the Societies and Zemstvos	29.8	34.5	+ 4.7
Total	2,273.5	2,311.8	38.3
II. *Private Stock Banks and Mutual Credit Societies*			
a) Banks of Land Credit	1,340.8	1,337.7	+ 3.1
b) Bank of the Zemstvo of Kherson.	204.3	203.6	— 0.7
c) Credit Society of the Zemstvos of Poland	180.2	181.6	+ 1.4
Urban Credit Societies			
Of Central Russia	949.5	954.7	+ 5.2
Of the Baltic Provinces	116.6	118.7	+ 2.1
Of the Region of the Vistula	227.9	229.7	+ 1.8
Provincial Credit Societies			
Province of Petrograd	35.5	35.9	+ 0.4
Province of Moscow	1.0	1.2	+ 0.2
District Credit Societies			
Of the Zemstvos of Esthonia, Courland and Livonia	89.3	89.2	— 0.1
Land Credit Banks and Banks belonging to the towns of the Caucasus	110.5	112.9	+ 2.4
Total	3,255.5	3,264.6	+ 9,1
General total	5,529.0	5,575.4	+ 47.4

As these figures show the issue of mortgage bonds and of titles to land has largely increased — by 47.4 million roubles — in spite of the abnormal nature of the activities of the mortgage credit establishments.

The amount secured by mortgages of private indebtedness and of the indebtedness of funds belonging to towns has been of late years as follows, in terms of millions of roubles :

Year	Private Property	±	Real Estate belonging to Towns	±	Total	±
1910	2,773	—	1,265	—	4,038	—
1911	3,052	+ 279	1,394	+ 129	4,446	+ 408
1912	3,300	+ 248	1,497	+ 103	4,797	+ 351
1913	3,479	+ 179	1,643	+ 146	5,122	+ 325
1914	3,697	+ 218	1,757	+ 114	5,454	+ 332
1915	3,658	— 39	1,809	+ 51	5,467	+ 13

Thus in this year the increase of indebtedness has been in sum slightly less than previously and has occurred solely in the case of real estate belonging to towns (+ 51 million roubles), while the indebtedness of private properties has diminished (— 39 million roubles). As regards the profits of mortgage credit establishments the following figures which, in terms of millions of roubles, refer to mortgage stock banks have a certain interest.

Year	Capital of the Banks: Circulating	Capital of the Banks: Stock Exchange Value of Capital in Shares	Dividends	Interest paid on Capital
1911	81.6	217.4	12.8	6
1912	86.7	233.3	13.7	6
1913	89.5	237.6	14.2	6
1914	91.3	227.4	14.3	6 ½
1915	91.3	—	14.0	6 ½

The capital in shares is seen not to have varied in 1915. In the absence of all official quotations there are no other data as to Stock Exchange values.

Part IV: Agricultural Economy in General

GERMANY

THE LAND QUESTION AND THE LAND POLICY IN GERMAN EAST AFRICA.

SOURCE:

LOEHR (E): Die Bodenfrage und die Bodenpolitik in Deutsch Ostfarika, in *Jahrbruch der Bodenreform*. 3rd part, vol. XI, Berlin, 1915.

§ 1. General Remarks.

When the first Germans (Peters) reached Dar-ès-Salam there was as yet no question of any land policy. Whether on the coast or at Dar-ès-Salam or Tanga each man built his hut where he chose, and did not change his quarters until the surrounding territory no longer sufficed to give him nourishment. Only the cultivation of palms the — slowness with which these trees reach maturity — caused exceptions to this rule.

The earliest palm growers, who were almost exclusively Arabs, founded and recognized property of a sort.

By building massive houses of stone in the midst of their plantations they intended to signify to all men that they were lords and masters of the land they occupied. They were not however its owners in the sense which that term has in German law: the sole lord and the absolute master of the soil was the Sultan of Zanzibar. This was why when, in 1887, the German East African Society, strong in the possession of a letter of protection, wished to establish themselves at Pangani and Dar-ès-Salam, the Sultan Saïd Bargasch informed them that he would not suffer their presence and that he considered the two towns to be an integral part of his private property. In

the long run however he could not maintain this position, and a treaty which he concluded with the German East African Society deprived him of his rights of sovereignty.

It then became possible in the coast region of the German protectorate to convert property in the form in which it had hitherto existed into property as understood by German law. The evolution was effected noiselessly and was noticeably accelerated when the German Empire superseded the German East African Society, and East Africa was declared a German possession. German law was then immediately introduced into the country and enforced. The usufructory was simply recognized as owner in the German legal sense of the word. But the difference between usufruct and absolute ownership was nevertheless maintained in many cases. Under the Sultan's rule the usufructory had often not himself completely profited by the right he held but had granted it in part to others, who thus had come to hold the buildings and the plantations they had made as hereditaments which could be freely alienated. In this way two classes of tenants were created and both when the Sultan's sovereignty disappeared, made good their claim to rights of property. Landownership, in consequence, came to differ from the ownership of buildings or of palm plantations on the land. This form of property, which is inconsistent with the German civil code, is frequently met with in German East Africa : in the district appurtenant to the town of Tanga it obtains in at least a third of the holdings. Nevertheless conditions of land tenure corresponding in all respects with the definition of German law prevail on an increasing extent of territory. The growing value of the land as yet not cultivated, and the fact that Europeans will not brook a double tenancy of property, that of the soil and that of the buildings on it, contribute to such development.

Land held in conformity with German law occupies all the coast in greater or less proportion. It is found, needless to say, in the coast towns of Dar-ès-Salam and Tanga, each of which enjoys today its individual urban administration and is administratively united to the district bearing its name, the presidents of the districts being also the chief officials of the towns.

An ordinance of 1899 authorized the constitution of communal associations (Kommunalverbände); and in accordance with this edict the governor was able to decide that communal associations should be organized in the different districts. The chief effect of their activity was a better employment of the taxes and other dues rendred by the inhabitants. They were evolved in the course of the ensuing years and most districts came to be represented by them.

These organizations were presided over by the president of the district assisted by a district council having a consultant capacity. Their receipts consisted chiefly of the 50 per cent. tax on the houses and huts, but also of a series of small payments. They had considerable sums at their disposal, but their programme was not definite, and whenever they wished to enlarge the sphere of their activities they came into conflict with the official administrative body. In consequence they were suppressed by the former secretary of State Dernburg, except in the towns of Dar-ès-Salam and Tanga,

where however their sphere includes only the urban districts properly so called. These two towns subsequently adopted a land policy, having definite aims, which will form the subject of the rest of this article.

§ 2. Tanga.

All that has been said applies particularly to Tanga which in May 1912 adhered as a perpetual member to the Union for German Land Reforms (*Bund Deutsche Bodenreformer*). Immediately after the suppression of the communal associations the government offered to take part in advancing the ideals and aims of this union. It began its career by constructing a new Post Office building on land belong to the administrative of the town. This body refused to allow this site to be used unconditionally and refused to sell it, but declared itself ready to grant a lease which should contain an hereditary clause. The lease, the first of its kind in German East Africa, was signed in July 1912. By a further agreement the payment of an annual due of 2,000 rupees was agreed upon, but this was afterwards modified on the basis of a new estimate.

The grant of this land meant a certain sacrifice to the administrative of the town. Its landed property within the urban district was small, constituting only about a tenth of the 700 hectares which roughly represented its total area ; and it was necessary for the fulfilment of its task that the administrative should aim at increasing its property. Its most urgent duty was the sanitation of the town which entailed, first of all, a separation of the European from the native town. This measure met with grave obstacles. As the town had developed far-seeing speculators had, during the last five, ten or twenty years, obtained possession of the better sites. Hitherto speculation in land had been successful, for by the ordinance of 1899 as to taxes all uncultivated land had been entirely exempted from taxation, and the price of land had risen in consequence. Certain holdings, of which the price a short time previously had been only half a rupee or at most a rupee the square metre, sold for ten rupees the square metre or even more. A second result of this conditions of affairs was a great scarcity of dwelling accomodation in Tanga, which the town could not hope to remedy with any chance of success unless it could dispose of lands of sufficient extent on which to build.

This aim once attained the natives were ordered to settle in certain determined districts. This of course did not deprive them of the right of entering the commercial quarter of the town for the transaction of their business.

The native quarter was established in a palm grove in the outskirts of the town. The European town was planned to stretch east of the railway along the sea coast and towards Raz-Kazone. In right of the so-called Crown Land Ordinance (*Kronlandesverordnung*) of 1895 the government took possession of the land in the town abandoned by the coloured population and left ownerless.

The aims of the town's administrative were surprisingly well received by the natives. This was due to the discontent evoked by the action of speculators, who had often exploited the natives most unscrupulously. When the administrative began to buy land within its sphere there was an afflux of offers to sell from natives who were in debt, and the town's landed property grew rapidly. In 1912 it increased from 70 to 150 hectares; in the following year the increase was one of from 70 to 80 hectares: altogether 150 contracts of purchase were concluded.

These important acquisitions aimed at an improvement in the value of the land, which had been lowered as stated. Ready money was needed; and therefore it was decided to borrow 100,000 rupees from the bank of Tanga on current account, with the right to withdraw it gradually as need should arise. The rate of interest paid on this loan was low and did not surpass by more than one per cent. the rate charged for discount by the Bank of the Empire.

To enable the payment of interest, palms were planted as much as possible on landed property; and subsequently, the price of copra oil being profitable, these lands were let at high rents. At the same time the coloured population, who had been eliminated from the European town, were established elsewhere in garden-towns, an important practical measure which was taken in the interests of the town's sanitation. By leases containing hereditary clauses the coloured people received their lots to hold for thirty years at an annual rent of six rupees a lot. No other measure gave them so much joy. They found themselves in possession of a title granted by the town which guaranteed to them the uninterrupted tenure for thirty years of the land which had been allotted to them. The rent agreed upon, six rupees a holding, was very low. The land of a lot was quite sufficient for a four or six room hut with a kitchen and offices; and since the grantee lived in two rooms at the most he could let the others for one or two rupees a month. He was obliged to set aside about 300 rupees for building his hut, a sum which was however considerably reduced because the natives were helped by the town's administrative to shift their quarters and rebuild their huts. The natives of the town thus had a good bargain. The author is unable to say exactly how many contracts were concluded in 1912. The budget of 1913 contemplated an expenditure of 1,000 rupees.

The palms previously the town's property and those planted on the newly acquired lands brought in a sum of 10,000 rupees. Altogether the receipts from parcels of land reached, in 1913, 13,000 rupees as against 5,000 in 1912. In 1912 a sum of about 21,000 rupees had been taken from that borrowed for the purchase of lands, and this has therefore produced a considerable revenue. In the budget for 1914 the receipts from these lands were estimated at 19,000 rupees, and the expenditure under the same head at 35,000 rupees

When the town's administrative had followed the land policy which we have described from May 1912 to March 1913, and had demonstrated irrefutably that it was both wise and practicable, the whole matter was submitted to the approval of the government. At the same time the town's

administrative decided in agreement with the council to modify the whole framework of the budget and give it the same bases as the movement for land reform. Its receipts had hitherto consisted in the taxes on houses, huts and businesses, the rate for scavenging, the rent of the market buildings and the results of adjudications for recovery of funds ; and were estimated at 43,000 rupees. The town's administrative decided entirely to forgo the tax on huts and houses and to levy instead a land tax based on common values. Accordingly the town was divided into zones : Zone I. business quarter ; Zone II. — quarter between the railway and the shore as far as Raz Kazone ; Zones III and IV — grouped about the two first. As all the uncultivated land in Zone I was to be held to constitute building sites, it was assessed at double the tax incident on the other properties. A prescriptive right was moreover provided for the municipality. Taxes based on common values were as a rule so calculated as to give the town a far larger sum than it had received as the result of additions to the taxes on huts and houses. Taxes on businesses and on the increased value of lands were proposed in addition to this land tax.

The town council approved this project, against the principle of which the government had nothing to say. But since the ordinance enforcing it was not popular with the middle class townspeople it was delayed by the government for a year, and the budget of 1913 was entirely retained in its earlier form. The budget of 1914 was however framed on the new principles, and it was presumably adopted by the government.

§ 3. Dar-ès-salam.

In this town different circumstances have prevented an advance according to the principles applied at Tanga. The towns' administrative could not pursue a policy so manifestly one of reform as that followed at Tanga, because only a small extent of territory was held by Europeans or natives. Two thirds of all the natives, that is about 1600 of them, occupied the Sultan's lands (*Sultans* or *Schöllershamba*) which, extending to 24.2 hectares, included the greater part of their reserve, and which belonged to an European association from whom they received their right of settlement. It was therefore a matter of political interest that this property should accrue to the town's administrative and thus be safeguarded from speculation. The public treasury advanced half a million rupees to the municipality to enable them to acquire the *Schöllershamba* ; and the contract of sale between the owners and the towns' administrative was signed in the spring of 1915. Thus the administrative of the town of Dar-ès-Salam has acquired the means for a course of action similar to that pursued at Tanga.

FRENCH PROTECTORATE OF MOROCCO.

I. THE REFORM OF "HABOURS" PROPERTY.

SOURCE:

GAILLARD (Henri), General Secretary of the Sherifian Government: *La Réorganisation du Gouvernement Marocain* (*Renseignements coloniaux et documents*, published by the Committee for French Africa and the Committee for Morocco, supplement to *L'Afrique Française* for June 1916.

§ 1. THE ADMINISTRATION OF THE HABOURS BEFORE THE PROTECTORATE.

The institution of Habours is traced back to the Prophet. It has thence an essentially religious character and plays a most important part in all Mussulman countries.

Habours are of two kinds — public and private: the former are such as have from their origin been assigned to a religious foundation; while the usufruct of the latter has been granted to the direct heirs of the founders, and they come within the class of public Habours only after the extinction of the direct line of those who constituted them. Habours of both kinds are inalienable and imprescriptible: they cannot be sold or given away, or pledged, or included in a partition among heirs. Habour property is therefore perpetually sequestrated; and revenues from public Habours must be devoted to religious or public objects according to the will and the directions of the founder.

The institution of Habours reached its zenith under the Almohades and the Merinides. In this period, that of the greatest splendour of Islam in Maghreb, their revenues served to build most of the mosques and the medersas which are still standing in our day, to support advanced Mussulman education, and to contribute to numerous works of charity and public usefulness among the Mussulman community.

In the troubled period which followed, that of the Sherifian dynasties, Habours were in danger. Several Sultans attempted a reaction in their favour; and educated Musulmans have not yet forgotten the efforts of of Moulay Abderrahman and of Sidi Mohammed, ancestor and grand father of the reigning Sherif, to redress the evil which had attacked them.

But the evil was stronger than its remedy : it continued and was aggravated, and it brought Habours to the brink of ruin in the two reigns which preceded that of the present Sultan.

The Sultans had the right to reward important services rendered to the Mussulman community by military men, and learned men who had fallen into poverty, by granting them temporary enjoyment of certain immovable Habour property. Moreover the Sultans could, in certain exactly defined cases, authorize the exchange of Habour land, for other immovable property of which the value was higher than its own by about one third, the profit to the Habours being held to legalize the transaction. These prerogatives gave rise in the time of Moulay Hafid to the most scandalous abuses, and many Habour properties were squandered by their means.

It goes without saying that the nadirs did not fail to follow the example set them in high places : interested deflections of property, dissimulation of receipts, exaggeration of expenses, destruction of title-deeds and archives —every means to their end seemed good to them, and their fraudulent activities were rendered particularly easy by the complicity of tenants, who occupied Habour properties in right of rents so trifling that as much as 95 % of their leasehold value was lost. Sometimes these rents did not even cover the cost of repairs incumbent on the Habours for land on which there were buildings.

The result was that many Habour properties had disappeared, that such as remained, and were still capable of yielding considerable revenue, brought in hardly anything, that religious buildings and Habour real estate were falling to ruin and waste, and that most of the public objects for which Habours had been founded had had to be abandoned.

§ 2. The reorganization of habours.

Such was the condition of the Habours on the day after the Treaty of the Protectorate was signed. To reorganize them was no easy task. The plan of administering them directly was not to be thought of : what had seemed quite natural in the matter of the domains would have been a veritable scandal in the case of Habours. It was necessary to proceed only with extreme caution and to be strictly guided by legal and customary right : otherwise any organization would have seemed to the natives an attack on their religious traditions, and reform would have run the risk of appearing as a sacrilegious assault on the inalienable and imprescriptible property of the Mussulman community.

All that it was possible and useful to do was completely to reorganize the administration of the Habours, giving it an entirely native staff, inspired and controlled, strictly but with all possible discretion, by the General Secretary of the Sherifian government. His control of and collaboration with the reorganized staff was designed to aim also at the economic development of the country, which had been considerably hampered by the almost complete disqualification of the property in mortmain.

The first measures to this end were the formation of the General Directing Board of Habours, later transformed into a vizirat, and the institution of " mouragibs " who were charged to control and direct the nadirs in the important centres. At the same time an especial service was formed in the General Secretariat of the Sherifian government, which had the duty, together with the vizirat of the Habours and the Maktizen, of elaborating settlements, superintending execution, and playing the part of a permanent adviser to the native staff.

The objects to be attained were the following :

1) the wasting of Habour properties was to be definitely stopped ;

2) privileges were to be suppressed by the resumption of the real estate granted irregularly ;

3) a register of public Habours was to be made (the controlling right of the administrative over private Habours is only relative to their inalienability) ;

4) by practical management the maximum profit, consistent with the necessary precautions, was to be derived from public Habours ;

5) care was to be exercised that the revenues should be entirely devoted to the objects to which they had been assigned.

§ 3. Measures of preservation and improvement.

From October 1912 the General Directing Board of Habours was in being and at work. Several " dahirs " and circulars at once appeared for the organization in every town of commissions charged to identify and value the Habour properties. Any new conveyance affecting immovable property, certainly Habour, was forbidden, without the authority of the directing board. The grants of temporary use, revocable at the Sultan's pleasure, were annulled ; but out of consideration for the occupiers, it was decided that those who had benefited by them should remain in possession if they paid a rent.

The general settlement for the improvement of Habours was promulgated in July 1913. The basis of the new reorganization, it had entailed laborious and profound study, and much tact and patience were needed before those interested could be induced to recognize the equity of the reforms it ordered and, above all, to agree about them. Its chief results were : the summary end of many abuses by the establishment of the principle of the public auction of property ; the inauguration of long leases which allowed the new cultivation of land ; and the facilitating of the exchange of Habour land.

We summarize its provisions briefly.

Leases and exchanges of immovable property by private agreement, which gave rise to implications and abuses difficult to prevent, are forbidden. All conveyances having reference to productive Habour property are to be made by means of public auction, in accordance with clauses and conditions set out in specifications and with the following restrictions :

1) Leases of productive buildings and of cultivated land for one or two years can be given after auction.

2) Ruined buildings and lands employed for extensive farming or suitable for kitchen gardening can be let on leases of ten years. The specifications explicitly state in this case that all tenants' improvements to the immovable property shall fall to the Habours at the termination of the lease, no case for the payment of an indemnity having been created. When however such improvements are recognized to have given to the property in question an increase in value equal to five times its original leasehold value, the tenant has the right to ask for the extension of his lease for a period of ten years, at a rent increased by 20 % of its original amount. At the end of this second lease he can obtain a new extension for ten years on the same terms.

This regulation of long leases has already had happy results. It allows the settlement, for a long period and in good conditions, of colonists who have not sufficient capital to acquire agricultural land in Morocco. The fruits of their labour and of the improvements they effect on their leaseholds are assured to them for a long period. The Habours profit equally; for at the expiry of a lease of uncultivated land, given on such conditions, the religious foundations recover possession of immovable property in the shape of buildings in a state of repair, or land brought into cultivation and improved.

Before agricultural land is let on long leases the Administrative Board of the Habours always requests the Agricultural Directing Board for a consultation regarding it : the nature of the soil, its capabilities, and the rational mode of utilizing it are determined by the latter ; and the Habours Board incorporates in its specifications the conditions thus found to be necessary to securing the maximum return from the land. Thus the colonist tenant is protected against routine, and a rational direction, of which he himself will cull the first fruits, is given to his labours. It is hoped that this semi-official method of colonization will give good results. Unfortunately the rural Habour properties are neither very numerous nor very important, the possessions of the religious foundations consisting mainly of urban real estate.

3) The [illegible] settlement in perpetuity of real estate could at any time become inconvenient [illegible] a country which, like Morocco, is developing rapidly. Lands or [illegible]difice estate in buildings, belonging to the Habours and situated in the urban [illegible]bour[illegible]tricts, run especially the risk of barring the extension of a town or of a particular industry. It was indispensable that the State or private persons should become owners of Habour real estate without injury to the interests of the religious foundations. The " dahir " already mentioned has laid down conditions under which real estate may be enfranchised and its sale by public auction ordered.

These rules need completion : the quota due to the Habours from those immovable properties which are encumbered with the rights of " menfâ ", previously mentioned, ought also to be capable of enfranchisement and sale, under the conditions prescribed for real estate belonging entirely to

the Habours. As soon as the status of the properties encumbered with " menfâ " has been simplified the regulation of Habours will be complete. The present settlement is most elastic : from the economic point of view it avoids the cast iron mould which the principle of the settlement of a property in perpetuity constitutes ; it facilitates in a measure the colonization of the country ; and, while deriving a maximum revenue from the real estate, it avoids all the faults for which in other countries property in mortmain has been blamed.

§ 4. The rights of " menfâ ".

It was necessary to reserve the decision of a more delicate question. Various rights of real estate, commonly called rights of " menfâ ", were held by third parties on a large proportion of the Habour properties. These rights, of which there are analogous examples notably in Tunisia and Egypt, rest on a custom which is in reality contrary to law. For the law contemplates in the leaseholder of a Habour property, saving where there is an especial contract, only a simple right of priority dependent on the payment of a rent. Thanks however to the carelessness of administrators leaseholders often ceded the succession to their tenancy to third parties, in consideration of an indemnity exacted on the pretext that there was a conveyance of goodwill, furniture or small stock ; and thus this right of " menfâ ", which customary law has now rendered sacred, was born.

Since many foreigners bought "menfâs", discounting, when difficulties arose, the support of their governments, the Act of Algeciras dealt with the question in Article 63, and the conference commissioned the *corps diplomatique* in Tangiers to solve it equitably, in concert with a special commissioner to be named by the Sherif.

No direct revision was therefore possible outside the *corps diplomatique*. This difficulty was however evaded by a decision of the Sherif, which, without impugning the treaties, fully safeguarded the interests of the Habours. It forbade that in future there should be any cession of a " menfâ " without the authorization of the Habours. The administrative of[illegible]ce latter, without attempting to revise contracts, gave this authorization[illegible]equity[illegible]nveyances of regularly established rights ; but refused it to others, the[illegible]ts chi[illegible]spending conveyance provisionally, until the revision contemplated b[illegible]ent convention should have taken place.

Thus it became a matter of urgent necessity to define the nature and extent of these rights of " menfâ ", as to which the jurisconsults were not in complete accord. A commission of " Oulénur ", or doctors of law, chosen from the different towns of the Sherifian empire, was charged to elucidate this important question. Native leading men brought their experience to the help of the commission.

The commission decided the legal point at issue as to the " menfâ ". Permanence of tenure was given to all who held these rights regularly, paying

a rent. The priority of the leasehold tenant was to some extent legalized, in that his right to cede the succession to his tenancy, which only custom had established, was recognized. The Administrative Board of the Habours did not however exact the legal rent. It wished to deal with the actual position of affairs in a manner which should injure as little as possible the third parties interested.

The "dahir" of 27 February 1914 was promulgated. It established the perpetuity of rights of " menfâ ", giving thus the greatest possible security for future transactions. It exacted from the tenants a rent of only 30 % of leasehold values, the remaining 70 % being ceded to them in compensation for the price at which they had acquired their holdings. Even this rent of 30 % was paid subject to the following scale :

15 % during the first six years,
20 % during the next six years,
25 % during yet another period of six years,
and 30 % from the date of the expiry of that period.

Moreover a delay of two years was granted before payments on the new basis would be received.

Finally the " dahir " determined the tenants' option to dispose of their rights, by sale or otherwise, in conformity with the rules it specified. The question of the " menfâ " was thus definitely settled.

The definition of the rights of " menfâ " and the new stability of the rent due to the Habours are destined to have, economically, a yet more far-reaching effect, when rules shall have been made for the repurchase of rents due to Habours, already contemplated by the administrative board. It will then be possible for the tenants definitely to free their holdings in real estate from the burden of a permanent and hampering rent, and property thus freed, having lost its inalienable character, will become part of the common domain. The Habours will profit also, for by employing judiciously the funds resulting from such repurchases they will form for themselves an independent and more easily managed property.

§ 5. The higher council of the habours.

The edifice of reform was crowned by the formation of the Higher Council of the Habours, instituted by a " dahir " of 21 May 1914. Its duties embrace the verification of accounts, the examination of budgets, the constitution of reserve funds, the re-employment of funds, and kindred matters.

It has been useful from several points of view. Hitherto the Habours had been managed without any control by the local authorities ; and their position and certain customs by which they were ruled differed markedly with towns and districts. It was necessary therefore that it should be possible to consult the leading men and the doctors of law in the various towns of the empire. Moreover the reorganization of the Habours and the suppression of abuses had given rise to some malcontents ; and therefore

it was necessary that in Mussulman circles it should be well understood that there was no question of attacking religious foundations, but rather of multiplying their fruits and of employing their revenues in accordance with the precepts of religious law.

The council's first meeting took place in November 1915. Because of its exceptional importance some twenty of the chief native leaders and jurisconsults were invited to attend it in a consulting capacity. The bearing of the reforms undertaken, of the results obtained and of the projects which the Administrative Board of the Habours hopes to realize, was explained to all present at the meeting.

From the statements made and the documents exhibited it appears that the revenues of the Habours have more than quadrupled in two years. About 16,000 properties, representing a value in land of 65 to 70 million pesetas, have been verified and inscribed on the summarized registers of the Habours. The annual receipts surpass the expenditure by 400,000 pesetas ; and it may be prophesied that when the reforms which have been ordered have produced their full effect — that is to say in some twenty years — the Habours of Morocco will have at their disposal an annual revenue of at least five millions, which will suffice to meet all the needs of religious observance, of justice and of Mussulman education, and in addition to contribute largely to native charitable enterprise.

2. THE NEW MEASURES FAVOURABLE TO COLONIZATION.

SOURCE:

RENSEIGNEMENTS COLONIAUX ET DOCUMENTS, published by the Committee for French Africa and the Committee for Morocco, Year 1916, No. 7.

When the forecasts of the agricultural season of 1916 were appearing the Resident General made a point of an examination of questions bearing on the development of colonization and of agriculture generally in the country and of the measures necessary for their encouragement. To this end he gathered together the interested directors and heads of departments in a conference, which has succeeded in defining a certain number of questions and in enacting immediately or foreshadowing certain measures, here summarized.

§ 1. Taxes falling on colonization.

A) "*Tertib*" (*Tax on the product of harvests*). — A circular of 31 January 1916 made the "tertib" more elastic and liberal in its application. It ruled that in order to establish with certainty tables according to which holdings, of which the value had been declared in terms of the quantity of grain sown, should be valued in terms of hectares, the relation obtaining, in lands of different categories, between the quantity of seed used and the extent of land sown, must be determined by experiment.

As regards the valuation of yields it specified that this should be made with the greatest care, and with the advice of experts and prominent local agriculturists, native and European, and should involve tests conducted over a determined area of cultivated soil at the time of harvest and at seed-time. Further the circular ordered that in doubtful cases of valuation the factor most favourable to the agriculturist should always be presumed.

The tariffs — framed in 1915 in such a manner that the average tax should not exceed 5 % of the gross product of harvests, when the value of the seed, estimated as a quintal to a hectare, had been deducted — have been the object of a revision, inspired by a desire at once to safeguard the resources of the Treasury and to impose no exaggerated burden on the taxpayers.

Finally the rapidity in drawing up lists and receipts, which has resulted on a simplification and decentralization of procedure, will allow the tax to be collected very soon after the harvest, between the months of July and September.

The arrangement has been completed by the creation of agricultural premiums which will be given to European and native cultivators who have brought under cultivation land previously waste, and have substituted for the hasty action of the Arab plough perfected methods of digging and tilling the soil.

It seemed possible to the Resident General to go still further. To diminish the risk of error in estimating harvest yields he decided to add to the commissions for the valuation of standing crops professional agricultural experts, chosen from the territorial battalions which come from France and are all drawn from the essentially agricultural districts of southern France.

The commissions thus constituted will give every guarantee of their competence; and moreover their estimates may, at the request of the taxpayers, be revised by expert commissions, to whom, for the examination of the claims of the cultivators, a delegate of those interested will be added.

In addition, in order that the tariffs applied in 1915, which in any case are moderate, should be beyond criticism, it has been decided to increase by 25 Hassani pesetas that deduction from the taxable value of the harvest of 50 Hassani pesetas a hectare, which is held to represent the price of seeds and the cost of cultivation. Therefore the average proportion of the tax to the net produce of the harvest will become 5 %. The relief thus given will be very great, and indirectly it satisfies wishes for the exemption from

taxation of animals employed on agriculture, a benefit which could not be conferred directly because in Morocco it is impossible to establish a distinction between draught animals and those used for breeding and direct food production.

The tax on trees, assessed by a very low tariff, has not been modified, since the existence of a trifling tax could not either cause the destruction of trees or hinder reafforestation in the country, especially since it attaches only to fruit trees and to them only from the beginning of their productive period. All precautions are taken in order that only trees which really bear fruit should be taxed. Moreover, owing to the importance of reafforestation, the Resident General has decided that prizes shall be instituted for the planting of trees.

B) *Export duties on cereals.* — The Resident General has handed to the government a proposal intended to decrease by 50 % the export duties on cereals. This measure necessitates negotiations and an agreement with Spain, owing to the principle of the customs union between the French and Spanish zones.

§ 2. Utilization of the territorials for agriculture.

There are in the territorial battalions, which come from France and are all drawn from the essentially agricultural districts of southern France, elements which can usefully contribute to the agricultural development of the country.

In this direction practical results have already been obtained. M. Malet, the Director of Agriculture, in concert with the Service of Civil Information and Control, makes use of territorials in several districts as agricultural advisers for the guidance of the natives and the improvement of their methods — at Fey ; in the Zehroun group ; at Rabat and Salé for vine-pruning ; at Fey and Meknès for pruning olive-trees ; at El-Hajeb and Settat for making reserves of fodder ; and at Mechra-bel-Ksui, Ben-Ahmed, El-Boroudj, Settat and Ouled-Said for sheep-shearing.

The Resident General has decided to extend in new directions this use of territorials. Thus from 1 October 1916 a detachment of territorials, experimentally constituted in the Fez district, will work at the improvement of the land (cultivation of wastes, sinking of wells, etc.) on the agricultural domain of Ras-el-Ma. We have already mentioned the arrangements for adding to the commission for the valuation of standing crops, for the purpose of assessing the *tertib*, agriculturists from among the territorials whose practical knowledge will prevent mistakes in the work of classification and taxation.

§ 3. Formation of a chamber of agriculture at Casablanca and of an agricultural department in the district office of economics at Casablanca.

The formation of this chamber, which was decided on by the Resident General, will have become an accomplished fact by the time this article is in print.

Moreover the Casablanca District Office of Economics, which has hitherto directed its activities towards trade and industry, will extend them into the sphere of agriculture. The Resident General has decided to attach to the chief of the Office of Economics a specialist in questions of agriculture and colonization who will belong to the staff of the office and will keep it in constant connection with the laboratories for agricultural experiment already at Casablanca.

§ 4. Colonization.

Colonization in Morocco presents, by reason of the position as regards the land, of the needs which it should supply and of the possible forms of its development, most various and complex aspects. Many points of the problems which it raises are already on the road to be solved.

A) *Small colonization. Kitchen gardening.* — The incessantly growing need of the towns for vegetables and fruit makes the formation of allotments for kitchen gardens, situated as near as possible to the urban limit and on very good soil, particularly opportune.

In the immediate neighbourhood of Kévitia two pieces of land, having a total area of 80 hectares, are being allotted and comprise 23 lots, each measuring from 2.25 hectares to 5.65 hectares according to the situation. The lots are to be let with a promise of sale, to take place as soon as the registration has been announced. The tenants will incur an obligation to improve the value of the land immediately. Allotment is to be made exclusively to French inhabitants of Kévitia who can prove their settlement on an urban lot in Kévitia. At Fez eleven lots, having an average area of 3.50 hectares and situated near the town, have just been let by public auction for a period of six years.

As regards Casablanca the agricultural directing body is considering a scheme for allotting certain pieces of domain land situated near Bourskoura. Eight lots, each having a an area of from 4 to 7 hectares, are contemplated ; the leases are to be for ten years, and it was intended that the lessees should enter into possession on 1 October 1916.

At Meknès the formation of allotments for kitchen gardening is under consideration.

At Robert-Salé the Habour lands of Ouldja of Bou-Regrez lend themselves particularly to transformation into gardens, and the administrative board of the Habours has already made an allotment which was been carried out according to the customary rules (leases of 10 years, twice renewable provided the tenant does certain work, indicated in the specification, for the improvement of the soil). On the same conditions three new lots of 4 hectares each will be let for next agricultural season.

B) *Colonization near railway stations.* — As soon as the line of the new railways shall have been definitely fixed the administrative will undertake the allotment of land near the stations, each lot not to exceed 20 hectares in area. Such an allotment is already under consideration for the centre Sidi-Yahia, which is situated between Kévitia and Dar-Bel-Hamri on the military railway.

C) *Colonization on a medium scale.* — This scheme will aim at forming lots of land having an area of from 100 to 150 hectares, and capable of becoming farms.

It will be realized by the aid of the financial resources emanating from the loan guaranteed by the metropolis and its benefits will be reserved to Frenchmen and natives, who will be subject to certain obligations as regards the stocking and the improvement of the land, while the administrative will allot allowing facilities for payment.

The formation of such a group of farms is at present under consideration at Sidi-Kacem (Fort Petitjean), and preliminary mesures are being taken in such wise that it will be possible to make the allotments for colonization at the conclusion of the war.

The possibility of forming similar groups of farms in other districts of Morocco can follow only on a taking stock of domain lands and the simplification of their legal status. The department of domain lands is actively engaged on these preliminaries.

Besides those domain lands, recognized as adapted for cultivation in connection with this colonizing enterprise, the directing board of agriculture will, by means of loan funds, be able to buy, in the districts served by the projected railways and those in course of construction, other lands for cultivation. Further the organization of remnants of tribes will allow the Makhzen to authorize, as opportunity occurs, the alienation of certain collective holdings. Thus some previous conveyances of real estate which were made in good faith will be regularized, and that very slow gradual evolution of some inalienable collective property into private property, which began before the Protectorate, will be favoured, while all necessary measures for the protection of native collective property will none the less be safeguarded.

D) *Colonization on a large scale.* — The administrative will assist those landed societies which will lend themselves to the division of their properties into allotments, with a view to the constitution of farms for the cultivation of the land. To this end the administrative will take part in the making of desert roads and in the public provision of tools which such allotments will entail.

E) *Development of native thrift societies.* — As regards the especial concerns of the native element in the population the Resident General has prescribed, besides the creation of allotments reserved to natives, the extension of native thrift societies with a view to combating usury, to developing the spirit of association and of thrift, and to improving the conditions of agriculture by collective purchases of seeds, agricultural material and animals for breeding.

Such are the principal problems of colonization which the Resident General is seeking to solve.

RUSSIA.

THE RESULTS OF INTERIOR COLONIZATION IN FINLAND.

SOURCE:

ELFRING (Ö): "Vermögensbildung Kleinbäuerlichen Ansiedlung in Finland". (Formation of the Property of Peasant Small Holders). Helsingfors, 1915.

INTRODUCTION.

In the March number of our Review we remarked in a short notice on Mr. O. Elfring's book, "Vermögensbildung Kleinbäuerlicher Ansiedlung in Finland" (Helsingfors), on the great part the interior colonization of Finland is playing, and its significance for the whole national economy of the country. We then promised soon to make our readers more closely acquainted with this book which represents a great undertaking carried out with much industry and showing much acquaintance with facts. It is most instructive for it subjects the whole work of colonization to a very strict examination, separates it into its component parts, seeks to discover their combined effect, and considers the result thus obtained in the light of a scientific policy of colonization. The author may be said to impose on all action taken hitherto in the matter of land settlement in Finland an ordeal by fire, in order finally to answer the question as to whether the methods of colonization hitherto employed are fitted to serve the good of the people or not. The query is more fully expressed by several questions. Is the property of peasant small settlers in Finland growing or diminishing? Is it in a state of stagnation? Should the essays in colonization made hitherto be retained or should effort be transferred to other places? The answers to these questions are so important that we willingly follow the author further, in order with the help of very many statistics and of tables to form for ourselves a picture of the whole course of colonization in Finland.

In the following pages we will reproduce from the book only what seems to us most important for throwing light on these problems within the limits of an article.

§ 1. Agrarian construction and colonizing effort in Finland.

The whole area of Finland is according to the estimate of 1901-7 377,426 square kilometres, 88.27 per cent. being land and 11.73 per cent. water. Of the very extensive woods of the country 12,582,481 hectares belong to the State and 9,712,129 hectares to private owners. The cultivated land has an area of 1,878,381 hectares and the natural meadows extend over 941,243 hectares. Thus woodland distinctly predominates, and exists in a greater proportion to the total area than in any other European State (1). The population in 1912 numbered 3,196,371, of whom 2,711,961 were a rural population (786,055 in 1800). The population has increased in the last 60 years at the rate of 1.15 per cent. a year. The average density of population in Finland is 9.6 to the square kilometre, in the country communities (according to Gebhard) 7.4. The increase of population is chiefly absorbed by agriculture, as by the bringing of new soil under cultivation the agricultural land becomes more extensive, and as by the more intensive cultivation of existing farms its capacity to support a population is enlarged.

The following table gives some conclusions as to conditions which obtain on the land, especially as regards the distribution of landed property :

Size of Farms	No. of Farms	%	Total area	%
Under 3 hectares of cultivated land	106,462	39.27	59,734 h	3.35 %
From 3-10 hectares » »	78,778	29.05	450,015 »	15.82 »
» 10-25 » » »	56,790	20.94	876,003 »	30.79 »
» 25-100 » » »	27,269	10.06	1,107,379 »	38.91 »
100 or more » » »	1,855	0.68	316,060 »	11.13 »
Total . . .	271,154	100.00	2,845,191 h	100.00 %

It is thus the large and medium-sized farms (10-100 hectares) which include the greater part of the cultivated land, while the really small farms cover relatively only a trifling fraction of it.

As regards the distribution of farms according to the form of their tenure, whether freehold or leasehold, it is leasehold titles which are found most

(1) See *International Review of Agricultural Economics*, May 1916, p. 53, « Forest Insurance in Finland ».

commonly in Finland. Of all the country households in Finland — which in 1901 numbered 478,142 — 110,629 or 23 per cent. were on freehold land, and 160,525 or 34 per cent. on leasehold land, while to 206,988 or 43 per cent. no land belonged. The proportion of leasehold farms to all farms provided with land (whether freehold or leasehold) is, according to the latest data, not less than 59.8 per cent.; and is exceeded only in Great Britain, where the proportion of leasehold to the whole number of farms is 86.9 per cent.

The chief characteristic of Finnish agrarian conditions, and that which gives them their particular character, is the very large number of small leasehold farms. If the groups of small farms, classified according to their size, be examined it appears, according to the Statistical Year Book of Finland for 1914, that the following are the proportions which freehold and leasehold farms bear to each other.

Size of farms	Freehold farms	Leasehold farms
0.5 — 1 hectare	19.1 %	80.9 %
1 — 3 »	37.1 %	62.9 %
3 — 5 »	58.9 %	41.1 %
5 — 10 »	73.1 %	26.9 %

Thus the smaller are the farms the less is the proportion of them which are freehold, the greater that of those which are leasehold.

We must add that the leases of these farms are not only bad economically but also very unfortunate as regards the legal relations they establish with landowners.

The author describes the agrarian condition of Finland and states the problem of interior colonization in the country. It is clear that where 43 per cent. of the peasants' dwellings are without land and 80.9 per cent. of all holdings are parcel-holdings of an area of from 0.5 to 1 hectare, agrarian conditions can hardly be regarded as normal. The State endeavoured with much energy to improve the position of the rural population, to offer them a more secure livelihood. The lines on which it went to work were directed first towards the strengthening of small farms and the improvement of the condition of *torp* leaseholders by enabling then with State aid to acquire their leaseholds; and secondly towards the settlement on the land of the landless population.

With a view to the first of these ends the century-old institution tion of the *torp* (1) was brought to a jurisdictory position, especially by the law on leases, socially so important, of 1907-9. The right of individuals was by this statute subjected to the common law, which regulated

(1) The law on leases defines the *torp* as follows: "That parcel of a landed property is to be regarded as a torp which in return for a money rent is let as an agricultural farm and has already agricultural farm buildings or is about to have them."

the following conditions of leases: their duration; the obligation to work and its commutation for rent; the compensation of the leaseholder for his improvements on his farm; the length of working days; the right to give notice. A lease office has been formed, as an especial communal department, and is charged to examine the conditions of leases and adjust the opposing interests of landowners and torp leaseholders.

As regards its second aim, the settlement of the landless men — interior colonization properly so called — the State was for long engaged on the work of forming *torps* on the crown roads. The results did not however quite correspond to the wishes formed for them, and instead workmen's dwellings are now being constituted on such sites. Real colonization in Finland dates from 1908 when an especial credit fund for the landless was created. By this fund loans are assured by the State either for direct State colonization or for colonization through the medium of the rural communities. Credit is given to settlers as a rule only for the purpose of acquiring land. Only latterly has it been accorded also for the stocking of the newly formed farms, the improvement of buildings, and so forth. Formerly the newly formed lots were granted to those who acquired them, as freeholds. But since 1909 only leasehold farms have been formed, in order to enable the State to control these holdings and thus to prevent speculation in land from affecting them.

As regards the credit afforded, the settlers who buy with direct State aid have to pay 6 per cent. of the borrowed sum every year, that is 4 per cent. as interest and 2 per cent. towards repayment of the debt. When the communities are the medium of credit the rate of interest is 4 ½ per cent. plus a sum for redemption which is arranged according to the duration of the lease.

Home colonization in Finland has been strongly supported by the co-operative movement which latterly has become so important, and especially by the Pellervo Society. It came about that a number of the landless who wished to acquire land formed a co-operative society for such purpose, and sought the help of the State central credit department. Nine tenths of the purchase price is usually paid by the State (1) as mortgagee; the rest of the cost is borne by the members of the co-operative society. Since the co-operative societies for acquiring land are based on the principle of unlimited liability, and since while the mortgage is not fully paid up, they are collectively responsible for it, they offer the greatest security to the State and promise to be a very important factor in the interior colonization of Finland.

The following table gives us an insight into the work of colonization up to 1 January 1912, accomplished by the State directly and by the medium of the rural communities and the co-operative societies for acquiring land.

(1) See in our issue of February 1913 "Home Colonization in Finland", p. 142.

State Colonization in Finland.

Through	Figures date from	Numbers of newly formed colonists' lots		Average area of newly formed lots in hectares		Total purchase price per hectare of whole area in Finnish marks	Size of the loan per hectare of the whole area in Finnish marks	Whole area colonized in hectares	Number of newly formed colonies	Number of loans for	
		Small peasant farms	Workmen's lots	Small peasant farms	Workmen's lots					Buildings	Bringing land under cultivation
The State directly:											
a) freehold	1 Jan. 1915	533	192	47.3	2.3	77	77	25,662	13	—	—
b) leasehold	1 Jan. 1915	750	248	36.3	1.8	101	101	27,645	18	131	
Bought but as yet undivided properties	—	—	—	—	—	—	—	—	3	—	—
Co-operative societies for acquiring land	1 Jan. 1915	240	27	21.9		136	—	5,852	13	—	—
Rural communities.											
a) land acquired with State resources	1 Jan. 1915	288	33	31.7		111	111	10,163	6	—	—
b) with loans from particular colonization funds through medium of the State	1 Jan. 1914	7,708		19.5		107	58	150,306	?	1,386	711
Sum	—	10,019		—		—	—	219,628	53	2,228	
Average	—	—		21.8		—	—	—	—	—	

§ 2. Material of the enquiry and its conduct.

Eighty-five colonists' lots in seven different colonies were chosen for investigation and were subjected to an exhaustive examination by the inductive, analytical methods which were founded by Thünen and developed by the publication of the Thünen archives. The names of the investigated settlements, the purchase of land since the time of settlement and its delivery to the settler, the complete number of the colonists' and labourers' lots in the investigated colonies, the number of colonists' lots investigated, the nature of their tenure, and the time at which they were investigated — all appear in the following table.

Purchase and Distribution of Land for Colonization, the Conditions of its Tenure, and facts as to the Enquiry.

Name of Colony	The land of the colony was				Number of settlements investigated	Nature of tenure	Time occupied on enquiry Years
	bought from the State	delivered to the colonist	divided into				
			colonists' lots	sites for workmen's dwellings			
Muddais . . .	1/3/1907	14/3/1908	28	10	17	Freehold	4.33
Sippola . . .	22/4/1907	17/3/1909	85	26	2	Leasehold	3.33
Siikajärvi . . .	28/3/1907	14/3/1909	49	—	9	»	3.33
Nipuli	22/3/1907	27/2/1909	36	1	20	Freehold	3.33
Koskipää . . .	21/4/1900	18/4/1904	51	3	10	»	8.17
Takkula . . .	31/5/1904	14/3/1907	46	16	9	»	5.33
Seppälä	3/5/1905	14/3/1907	39	11	8	»	5.33
Total . . .	—	—	334	67	85		

The enquiry into the settlements was so successful that the earlier circumstances of the colonists and their personal characteristics could be taken into account. The author, in his capacity of a State official and Inspector of Colonization, had the opportunity of learning to know many colonists personally: in many colonies colonizing enterprise was initiated and carried out under his guidance, so that he can of his own knowledge describe the position of the settlements and the circumstances of the colonists before they became such, as contributing to the later developments.

In all the colonies there was a simultaneous taking stock on 1 July 1912, at the end of the period of enquiry, by means of question forms which had

to be filled up by the different officials for the different places. The officials also measured all the arable and meadowland and ascertained the comparative degrees of its employment for different kinds of agriculture, after the colonists had taken over their lots and on 1 July 1912.

When the lots were taken over the procedure of valuation was changed in order that it might be based on the costs of the most problable farming operations, since the colonists were not dependable bookkeepers. It was determined that an increase of property should be the result only of the farming activity of the colonists ; and therefore no provision was made for increase of property by commercial means, or for the improvement in the market value of the soil and of buildings after the lots had been taken over. In order that the formation of properties for farming purposes might be isolated, the capital to be devoted to forestry was sharply separated from that set aside for farming, and the two enterprises were looked upon as distinct. This proceeding was also influenced by the fact, already mentioned in the introduction, that forestry plays a greater rôle in Finland than in many other lands.

It is therefore possible to compare the progress of farming on the colonists' holdings to which no woodland attaches and on those which include woodland as well as agricultural land. The facts might form grounds for a comparison with results obtained in other lands.

With the double object first of ascertaining the development of property on those farms to which no woodland attaches ; and secondly of analyzing that development of farms which has been a result only of the industry of the colonists, the improvement of the soil and economical farming, but not of a rise in market values, the following classification has been. made

Assets	*Liabilities*
In the farm,	for debts on the land,
in the household,	for other debts bearing interest,
in secondary businesses,	for current debts,
in rights in the woodland,	for dues to the woodland,
in inherited payments and gratuities,	for inherited debts and payments.

The description of the particular forms of capital invested in the farms and the conditions of the land which affect their employment, is in its most important aspects set out in detail by the author according to the method ennunciated by Professor Laur (1).

(1) *Sieben Grundlagen und Methoden der Bewertung, Buch-haltung und Kalkulation in der Landwirtschaft*, pp. 129-144.

§ 3. Natural and agricultural conditions of the colonists' lots.

1. *Conditions as regards situation, trade and markets in the investigated colonies.* — The seven colonies investigated are scattered over the whole area of the country and form an almost rectangular quadrilateral. In the north west, between latitudes 62° and 63° there is *Seppälä* colony; in the south west between latitudes 60° and 61° *Muddais* colony; in the north east between 63° and 64° there is *Siikajärvi*; in the south west, within the same latitudes as Muddais there is *Sippola* colony. On the same line as Sippola and Muddais but somewhat more to the south there is *Takkula*; and on the line Siikajärvi — Sippola but also somewhat more to the south there are the two last and neighbouring colonies, *Koskipää* and *Nipuli*. Such is their topographical situation. We will now note their individual characteristics.

a) *Seppälä* colony, where eleven sites of workmen's dwellings and 39 colonists' lots have been formed, and where eight of the latter have been investigated (1), lies in the south of East Bothnia in the parish of Ilmajoki and there is in it a settlement of small farms. The State has here done more for colonization than in most other parishes in Finland. We find in this parish besides Seppälä three other colonies which were formed with the support of the loan fund for the landless population. The community has moreover taken a very active part in the work of colonization by the medium of the communal loan fund: by this means up to the end of 1913, 109 colonists' lots were formed. Therefore altogether 229 colonists' farms were brought into being.

The colony of Seppälä is of especial interest because there had been thence more emigration to America than from other districts of the country.

Seppälä is in a densely populated district, the people of which are almost exclusively employed on agriculture. The conditions for marketing the products of dairy farming are favourable, since in the neighbourhood of the colony there is a co-operative dairy at work. The colonists do not seek accessory employment.

b) *Muddais colony*, in which ten sites for workmen's dwellings and 28 colonists' lots have been formed, and in which 17 of the latter have been investigated, lies on the eastern shores of Pargar Island in Abo-Schären, at a distance of 22 kilometres from Abo. The colonists here received arable land in fit and good condition although in latter years it had been not at all or insufficiently manured. The crops of the clay lands in most years had however been very considerable. The markets for farm products, especially milk, are good. The price of milk varies during the year from 15 to 17 ½ pennis a litre. In so far as his time allows the colonist is able to find accessory employment in the neighbouring saw-works and the tar factory. Fishing and boating also add something to his income.

(1) The sites for workmen's dwellings have been left out of the investigation as they form only parcels of farms and are as a rule not mainly farms.

c) *Siikajarvi colony* has 49 sites for workmen's dwellings, of which nine have been investigated, and lies in the deepest woods of North Savolaks at the distance of a journey of from ten to twelve hours from the town of Knopio. From oldest times the population have lived in very straitened circumstances. Even in the years between 1860 and 1870 it was not uncommon to find cattle cake in use as an article of human diet. One of the worst enemies of agriculture used to be summer frosts. The condition of the roads — which is sometimes very bad, and compels trade, in so far as it does not go through the post, to be carried on by sleighs even in summer — made it very difficult for the country people to leave their homes.

Latterly conditions have so far altered as to improve the yield of the colonist smallholders by the improvement of their cow keeping and the corresponding arangement of their dairies. The milk is sold to the co-operative dairy. The average price for the cream skimmed from a kilogram of milk averages in the year 9-11 pennis.

It is to be noted that in the district in which this colony is situated the timber industry has constantly extended itself within recent years. This is a very fortunate circumstance, because it gives opportunities of work, when trees are felled, to the colonists ; but it has the disadvantage that it has caused peasant holdings to be reduced. According to the enquiry of 1912, 191 of them, having a total area of 87,841 16 hectares, or 22 per cent. of the whole area occupied by such holdings, were absorbed in the parishes of Nilsiä, Rautavaara and Kaavi by the sawmill companies.

d) *The colony Sippola* which has 26 sites for workmen's dwellings and 785 colonists' lots, 12 of the latter having been investigated, lies in the lowlands of the northern coasts of the Gulf of Finland, at a distance of 16 kilometres from the Helsingfors-Petrograd railway. When taken over the land was in an utterly neglected state. Only with great care could the soil again be brought under cultivation.

Woods and moorlands belong to the colony and are reckoned among the common property of the colonists. The two already existing co-operative dairies take the colonists' milk for the production of Swiss cheeses. The average price for a litre during the year is from 10 to 12 pennis. The condition of the roads is favourable, and this has a very good influence on the development of the farms. In this colony there is an ample supply of turf for the farms

Employment is easily obtained, especially in the neighbouring sawworks and celluloid factories, and in loading and floating timber. The least well off of the colonists absent themselves from their holdings and give themselves up to these works for longer or shorter periods.

e) *Takkula colony* has 16 sites for workmen's dwellings and 46 colonists' lots, of which nine have been investigated. It lies in the fertile valley of the river Kumo, at a distance of 7 kilometres from the nearest railway station, Äetsa on the Bjorneborg line. When there is a nearer station on the same line the connection with ship transport will be maintained. The conditions of trade and markets are favourable. The milk is used by one of the co-operative dairies. Accessory employment can be obtained by the

colonists — felling and floating timber and on the estates. But not much use is made of these opportunities for the colonists are almost exclusively occupied by farming.

f) *Koskipää colony* has three sites for workmen's dwellings and 51 colonists' lots, of which ten have been investigated; and *Nipuli* has one site for a workman's dwelling and 36 colonists' lots of which 20 have been investigated. These colonies lie at a distance of five kilometres from each other in the south eastern part of Hartola parish. The nearest railway station is at Hönterzeit, 35 kilometres away, or 30 kilometres in the summertime by the country roads. The conditions for trading are not good. There are no near markets for agricultural products; the little town of Heinola is 40 kilometres distant. The milk is sold to the co-operative dairy in Hartola, but it is not taken to it directly but to a fixed point on the road whence the dairy is itself responsible for its transport.

From this place the colonists have to travel 4 kilometres to Nipuli, a circumstance which makes the sale of milk difficult and causes butter-making to be undertaken at home. The finished product is sold to the local dealers and buyers.

Accessory employment, which would be very useful to the colonists of both these colonies, is little found, and that only in years in which there is much tree-felling. Many colonists seek to increase their means by doing carrier's work, but without much result for as a rule work of this kind is not frequently hired.

2. *Conditions as regards area and tenure.*

The total area of the 85 colonists' lots investigated was surveyed as follows:

Land held in severalty	2,622,236 hectares	= 70.9 %
Common land	1,080,555 hectares	= 29.1 %
Total . . .	3,702,791 hectares	= 100 %

The average area of cultivated land in the colonists' lots investigated, when these were taken over, is seen from the following table:

Name of Colony	No. of Colonists' Lots investigated	Land held in severalty in hectares					Ideal Division of Common Land in hectares			Total in hectares
		Arable land	Natural meadowland	Wood	Land incapable of cultivation	Total	Wood	Turf landing-places etc.	Total	
Muddais	17	5.226	0.759	9.534	0.170	15.689	—	0.078	0.078	15.767
Sippola.	12	4.839	4.621	2.652	0.099	12.211	17.957	0.093	18.050	30.261
Siikajärvi . . .	9	1.859	3.880	32.844	0.610	39.193	10.193	0.570	10.763	49.956
Nipuli	20	4.571	4.286	29.347	0.549	37.753	13.272	0.612	13.884	51.637
Koskipää	10	6.318	13.721	39.876	1.462	61.377	36.107	0.347	36.454	97.831
Takkula	9	7.908	2.950	10.283	0.042	21.183	9.477	0.337	9.814	30.997
Seppälä	8	5.146	10.189	21.712	0.045	37.092	4.356	0.046	4.402	41.494
Average area	—	4.829	5.110	20.487	0.424	30.900	12.398	0.314	12.712	43.562
% of total area	—	11.1	11.7	47.1	1.0	70.9	28.4	0.7	29.1	100
Total . . .	85	410.467	434.352	1,741.435	35.982	2,622.236	1,053.866	26.689	1,080.555	3,702.791

In the period occupied by the enquiry the total area of arable and meadowland in the different colonists' lots changed as follows :

	Arable land — hectares	Natural meadowland — hectares	Total — hectares
At the beginning of the survey . . .	410.467	434.352	844.819
On 1 July 1912	569.006	338.872	907.878
Additions	158.539	0.750	63.059
Deductions.	—	95.480	—

As appears from these figures the arable land has much increased at the expense of the meadowland, especially in the colonies Seppälä and Sippola. If we classify the investigated colonists' lots according to size, when they were taken over and on 1 July 1912, we obtain the following results.

Groups according to number of hectares of arable and meadowland	Number of colonists' lots			
	When taken over		On 1 July 1912	
	Total	Percentage	Total	Percentage
Up to 2.5	6	7.0	2	2.4
2.5 - 5	12	14.1	11	12.9
5 - 7.5	18	21.2	22	25.9
7.5 - 10	13	15.3	12	14.1
10 - 15	23	27.1	22	25.9
15 - 25	10	11.8	13	15.3
25 or more	3	3.5	3	3.5
Total	85	100.0	85	100.0

As regards agriculture in Finland the work is generally begun in the spring on the moorlands, before the cold has completely left the soil. After the ice has gone there comes to be great evenness of day and night tem perature. The farming year ends in South Fnland at the end of September In the middle of September the root crops are gathered. The ground generally freezes towards the end of October or beginning of November and some time afterwards it is covered with snow.

The rainfall is lowest in May and June — the very months in which the vegetation needs it most — and highest in July. This unfavourable distribution of rainfall is a drawback to farming in Finland which from oldest times has been notorious.

The conditions of temperature in the investigated colonies are, according to averages obtained at neighbouring points of observation, from May to the end of September, as follows :

In colony of	Muddais	12.9° centigrade
" " "	Takkula	12.1° "
" " "	Seppälä	11.1° "
" " "	Sippola	12.7° "
" " "	Nipuli	12.5° "
" " "	Koskipää	12.5° "
" " "	Siikajarvi	12.1° "

3) *Nature of the Soil and Crops; Live Stock on the Colonists' Lots investigated.*

From the point of view of the physical characteristics of the soil 32 per cent. of the arable and meadowland in the colonists' lots investigated was lowlying moorland, particulaly in Seppälä, Koskipää and Siikajarvi colonies. Land of this sort is usually employed as natural meadow and only rarely made arable. Loamy and sandy soil is found in about the same proportion as the lowlying moorland. In the colonies of Muddais, Takkula, Sippola, Siikajärvi and Seppälä loam predominates ; in Nipuli and Koskipää sand. As here and there the practice of clearing land by fire, which has the effect of reducing organic substances and lessening fertility, still obtains, the State has taken measures aimed at the improvement of places thus affected, by the addition of moorland soil.

As regards the yield of the soil there is still much irregularity connected with the conditions, already mentioned as existing when the land was taken over. Estates are still being laid out in parcels, such activity now embracing land once *torp*. The following areas had been brought under cultivation by the colonists as arable land on 1 July 1912:

Distribution of Crops on Arable Land on 1 July 1912.

Name of Colony	Fallow		Rye		Summer Corn		Potatoes		Grass		Total	
	hectares	per cent.	hectares	per cent.	hectares	per cent.	hectares	per cent.	hectares	per cent.	hectares	per cent.
Muddais	8.598	9.2	8.875	9.6	30.526	32.8	7.687	8.2	37.359	40.2	93.045	100
Sippola	9.480	11.6	8.720	10.7	23.320	28.6	2.660	3.2	37.460	45.9	81.640	100
Siikajärvi	3.090	11.8	2.870	10.9	11.910	45 7	1.280	4.9	6.980	26.7	26.130	100
Nipuli*	22.340	23.8	23.150	24.7	31.790	33.9	3.210	3.4	13.240	14.2	93.730	100
Koskipää	23.830	22.7	23.410	22.3	28.373	27.3	3.430	3.2	25.655	24.5	104.698	100
Takkula	9.700	12.8	8.580	11.4	30.239	40.0	2.635	3.5	24.354	32.3	75.508	100
Seppälä	16.980	18.0	17.550	18.6	30.940	33.8	2.550	2.7	26.235	27.9	94.255	100
Sum	94.018	16.5	93.155	16.4	187.098	32.9	23.452	4.1	171.283	30,1	569.006	100

From this classification of crops it appears that fallow land and land sown with rye are unusually prevalent in the colonies of Nipuli and Koskipää as compared with other crops. Otherwise conditions are everywhere much the same.

The position as regards the live stock on the colonists' lots investigated was on 1 July 1912 as follows :

1)	Horses under	3	years old	11
2)	» over	3	» »	130
3)	calves under	1	» »	177
4)	young stock	1-2	» »	64
5)	cows over	2	» »	369
6)	bulls over	1	» »	23
7)	pigs under	6	months	21
8)	pigs over	6	»	203
9)	sheep under	6	»	92
10)	sheep over	6	»	263
11)	poultry			374

4) *Money Liabilities of investigated Colonists' Lots.*

The 85 colonists' lots investigated were delivered to the colonists for 318,704 Finnish marks, an average of 3,749 Finnish marks for a lot. The price of one hectare is calculated as 86 Finnish marks.

The total prices is made up as follows :

1) The soil, including capital invested in the soil and stock of manure — 130,452 Finnish marks, *i. e.* 1,535 Finnish marks per farm = 41 per cent.

2) the buildings 39,801 Finnish marks, *i. e.* 468 Finnish marks per farm = 12 per cent.

3) the capital in woodland 148,449 Finnish marks, *i. e.* 1,746 Finnish marks per farm = 47 per cent.

The price is distributed among the lots and among agricultural and forest land as follows :

Name of Colony	Agricultural				Woodland		Total	
	Soil		Buildings					
	Finnish marks	Percent.	Finnish marks	Percent.	Finnish marks	Percent.	Finnish marks	Percent.
Muddais	30,292	43	10,808	15	29,584	42	70,684	100
Sippola	24,480	47	4,785	9	23,302	44	52,567	100
Siikajärvi	2,451	10	5,050	21	16,099	69	23,600	100
Nipuli	17,628	31	4,744	8	34,023	61	56,395	100
Koskipää	12,991	30	7,745	18	22,414	52	43,150	100
Takkula	13,498	47	3,595	12	11,727	41	28,820	100
Seppälä	29,114	67	3,074	7	11,300	26	43,488	100
Total	130,454	41	39,801	12	148,449	47	318,704	100
Averages	1,535	—	468	—	1,746	—	3,749	—

§ 4. Conditions of life and education among the colonists.

In the previous paragraphs the work of colonization has been described objectively: natural conditions and conditions of farming in the colonies have been sketched. We will now show to some extent the subjective factor in colonization, the personal value of the colonists as improvers of the property, their fitness for their task and their mode of life. Thus we will meet the stirring energetic man who before he took over his lot was an artizan or an industrial worker, distinguished by a certain activity.

Colonist's family No. 1.

This colonist was born in 1875 in a little peasant's farm in Mynamäki parish. At seventeen he went to Nystad to learn smith's work. He was there for three years first as an apprentice, then as a fully trained workman. He went to Nousiänien where he had a smithy of his own, and then to the little town of Nädendal. He worked for another half year in a claypit, and then as a shop assistant. Then for two years he again worked as a smith but gave it up and for five years was a driver. Finally, having reached the point at which he had saved a little money, he gave up his stirring life and looked for an opportunity to settle down on a small farm. He married the daughter of a peasant farmer who was in service with him for eight years. Besides a cow and a sewing machine the pair received nothing from their relatives. Their land is coming on well. The man follows his trade of a smith as an accessory occupation. They have seven children.

The type of torpar and agicultural labourer who had had fewer wanderings and yet is fairly enterprising, and who in his youth came into contact with town life, is met with often.

Colonist's family No. 23.

The colonist is the son of a peasant and was born in Sippola in 1873. In summer he worked in Kotkarben at transport, carrying timber onto ships and so forth; in winter in the woods. Until he was twenty he gave all his earnings to his parents. His wife is a tailor's daughter and was born in 1876. Their lot is developing well. They have seven children.

Colonist's family No. 30.

The colonist is the son of a torpar and was born in Nurmis in 1866. Until he was twenty-four he was a servant. He married and went to Nilsia where on new land he made a torp farm which later was included in the land distributed in colonists' lots. The farm is developing only slowly for the soil is bad. There are six children in the family.

Colonist's family No. 35.

The colonist, a peasant's son, was born in Tunsniemi in 1857. He lost his parents as a child and was brought up as a herd. He was a fisherman, a woodman and later, until his twentieth year, a servant. He then acquired a small torp holding on which he remained fifteen years, when he became

a keeper on the Siikärvi property. When it was divided up his torp became a colonist's lot. His wife died, leaving nine children. The farm is developing well, for several of the children are grown up and work on it.

The type of colonist who has previously lived on his lot as a torpar and is rather slow-witted than otherwise, is found especially in Nipuli and Koskipää, the colonies which we have already seen to rank last, as regards their natural and agricultural conditions, among the seven which have been investigated.

Colonist's family N° 39.

The colonist was born on a torp in Hartola in 1859. He worked in the neighbourhood. In 1892 he married and acquired a new torp holding in Nipuli, which, when the land was divided into colonists' lots, was taken over by him. The lot is not farmed with sufficient energy and its yield is not large.

Colonist's family No. 44

The colonist, a torpar's son, was born in 1873. He was a servant on the Nipuli property and married a servant on the same estate. Later he took over a torp lot. In this case the results obtained are not great. There are five children in the family.

Among the colonists, especially in the north west part of Finland, some are to be found who have been to America and returned home. Mental activity distinguishes these colonists very particularly.

Colonist's family No. 78.

The colonist, a torpar's son, was born in Ilmajoki in 1872. He married in 1893. He went to America where he remained two years and saved 2,000 Finnish marks. On his return he set up a farm on soil much exhausted by predatory farming, and through his labour and industry it developed well. His wife who was a servant brought 800 Finnish marks into the family on her marriage.

Colonist's family No. 80.

This colonist was also born in Ilmajoki and a torpar's son. He was born in 1879. At twenty-two he went to America and he remained there for six years, generally working on farms. He brought home some 2,500 Finnish marks and married in 1907. He and his wife are worthy, thrifty people. Their lot is unusually productive. When the colony was investigated this man's help was very useful.

Thus among the colonists we meet with elements from the most various social strata among the landless population, men who wish to rise and to build a solid foundation for their lives.

The members of the families on the 85 colonists'lots investigated numbered 475 on 1 July 1912, giving an average of 5.6 persons for each family. The annual consumption of these 471 members of families has been calculated by the author as one of 458,636 quota, or an average of 5,391 quota for each family. As regards the labour power of the colonists' families, when women's and children's working days are expressed in terms of those of men the author fixes the average contribution of each family at 692 men's working days. The number naturally fluctuates in individual families.

The education of the colonists is described as follows :

Boys between 12 *and* 17 *years old.*

2 able to read but without school education,
2 attending the itinerant, popular school,
3 " higher schools continuously,
17 " " " at intervals.

Men over 18 *years old.*

10 unable to read or write.
27 able " " but without school education,
24 " " " and write,
31 attending the itinerant popular school,
21 " " higher school continuously,
24 " " " " at intervals.

Girls between 12 *and* 17 *years old.*

1 able to read and write but without school education,
5 attending the itinerant popular school,
3 " " higher school continuously,
25 " " " " at intervals.

Women over 18 *years old.*

8 unable to read or write,
27 able " " but without school education,
23 " " " and write " "
34 attending the popular itinerant school,
11 " " higher school at intervals,
7 " " " " at intervals.

The co-operative newspaper " Pellervo " circulates among all the colonists, and the daily papers of neighbouring towns are read by them.

MISCELLANEOUS INFORMATION RELATING TO AGRICULTURAL ECONOMY IN GENERAL IN VARIOUS COUNTRIES.

FRANCE.

THE CULTIVATION OF ABANDONED LANDS. —

Following on the Chamber of Deputies the Senate adopted in principle and in its main tendencies a scheme for governemnt legislation on the cultivation of abandoned lands, with a view to restoring the normal level of agricultural production. In face of the revelations of statistics, which prove that in the one matter of autumn cereals the diminution in the area sown on 1 January 1916, as compared with 1914, reached 740,000 hectares in the non-invaded territory, government and public authorities could not be content merely to cross their arms and make a platonic appeal to private initiative.

Consequently the two legislative chambers were led to proclaim the imperious necessity of improving in every possible way the value of all the land of France. The Senate differed from the lower chamber only in the matter of a detail of executive which does not change the law's character, and therefore its final enactment may be considered very probable and very imminent (1).

But however speedily the chamber sanction the law its enforcement would threaten to be ineffectual for next agricultural season, which it was especially designed to secure, if the way for it were not immediately prepared by a certain number of preliminary measures which can be taken without waiting for the final voting. Such is the aim of a circular issued by the Minister of Agriculture to the *préfets* and dated 1 September 1916.

This circular is first concerned to refute the objection that the proposed system is merely a form of agrarian socialism, a direct attack on the right of proprietors and cultivators who are dispossessed of their land without their consent by the means of a single requisition. " This objection ", says the minister, " would be well founded if a state of war did not justify temporary derogations from common law, so long as these be dictated by the higher interests of national defence". For that matter the right of requisition is here no more exorbitant than it is in the case of dwelling houses and factories and it will be less rigorously exercised. It will in

(1) This prognostication has been realized, the law having been promulgated on 6 October 1916.

effect be strictly enforced only in the case of landowners and cultivators who neglect their duty, who do not wish to exert themselves seriously, who, through laziness or selfishness, leave their lands untilled. Such form even today only a very small minority, which will be much diminished when the law has been passed : the mere threat of its enforcement and of the requisition of land will not fail to awaken many sleeping consciences, and will decide most of the recalcitrant at least to seek for tenants, if they themselves will not or cannot cultivate their land. For such as wish to do so nothing will be easier than to avoid the pains of requisition : they will merely have to prove that circumstances outside their control have constrained them to abandon their land.

The mayor will be judge of the reasons given by cultivators to justify their inaction. The right of requisition, granted to mayors, is already exercised, in time of war, in regard to all other forms of immovable and movable property, and has given rise to abuses only in very exceptional cases. The municipalities, being controlled by public opinion, realize that the least injustice will later bring them bitter reproaches, and they take pains to annoy no one. They are moreover always controlled by the administrative authority, and there could be an appeal against their decisions, if these were systematically coloured by partiality, to the *préfets* or even to the competent ministers.

What is more to be feared is a tendency in these decisions to exaggerate the scope of the law, and to apply it too readily in cases in which its enforcement has very probably been sollicited by the cultivators themselves.

If the decisions satisfying such requests be given with moderation, their optional character being preserved, the Minister of Agriculture considers that they ought to be encouraged rather than otherwise ; for the law is intended not only to bring to reason cultivators who have deliberately abandoned their lands, but also to relieve those who find themselves powerless, who wish to till their lands but cannot do it. Their class is numerous : there are the bachelors mobilized for military service, the widows without children or with young children, the mobilized landowners whose tenants have gone. Landowners living in the invaded departments who cannot look after their interests might be placed in the same category. Their lands are in reality ownerless for the moment : cultivators unable to respond to the formal request to cultivate their holdings cannot but be grateful to the municipalities who replace them rather than leave their property to go to waste.

We should mention also the cultivators now at the end of their resources who abandoned their land only because they lacked the indispensable means for its continued cultivation — in some cases labour, in others teams, in yet others machines, or money to buy manure and seed. These could easily evade the requisition, for it would not be difficult for them to prove that they have given up cultivation for reasons independent of their will ; but it is very possible that in their desire to resume their interrupted task

they will not respond to the formal request of the *commune* within the fifteen days, in order that they may benefit by the advantages of requisition.

It will be the part of municipalities to make judicious selections, concerning themselves first with the most important cultivators ; for the law does not propose to impose on them an obligation to take charge of all abandoned lands without exception — a task which would often overtax their strength and their resources —, but merely makes it their moral duty to use every effort in order to diminish as much as possible the extent of abandoned territory, giving a preference to the most marked cases of abandonment and working within the limit of the means at their disposal.

The exact aim of the law is to give them means for exceptional action which many cultivators now lack. As projected it gives them in the first place what is most important, namely competence, in that it authorizes them to entrust the practical management of farms to the prominent agriculturists of the *commune* who compose the communal Committee for Agricultural Action. The charge could not be given into safer keeping ; yet these committees would, in spite of their devotion to duty, be condemned to powerlessness if the municipal councils could not procure for them every sort of indispensable resource for restoring activity to the farms — such as teams, machines and advances in money. The law will allow the municipalities to requisition the draught animals of the *commune* in order to restore abandoned lands to cultivation, on condition however that such animals be available, in other words that their owners do not need them. Such requisitions ought to be made with much discretion.

The mayor will equally be able to requisition machines and agricultural implements for the same purpose, and on the same conditions, that is if the owners do not need them. Moreover the *commune* will have the right, in order not to have recourse to requisition, to buy and even hire machines, a power which will cause many difficulties to vanish.

The question of machines is at present one of the most important. The fatal diminution of the supply of labour and teams during the war, which will continue to be felt after the war, gives it a primary place. Science and industry have happily come to the rescue of agriculture, and the inauguration of agriculture by motor has made a veritable revolution. The employment of motors by *communes* and the Committees for Agricultural Action would allow the cultivation of the greater part of the abandoned lands in the most advantageous conditions, for the Ministry of Agriculture could come to the rescue by granting a subsidy equal to one third of the price of a machine bought. This subsidy might even be equal to half its price in districts devastated by the war.

The question of labour which is so important, and very instrumental to the abandonment of lands, remains. The law does not mention it ; but if the law will not solve the problem directly it will yet considerably improve the present situation with respect to it. All difficulties connected with labour belong today to the category of things military ; and it is the military authority with which one must constantly negotiate if one wishes to have the

assistance of labour. An isolated agriculturist, left to himself, cannot make his voice heard when he meets with a difficulty, and he is very often reduced to powerlessness. The situation will be very different when instead of isolated agriculturists it is municipalities and Committees for Agricultural Action who endeavour to obtain from military and civil authorities the labourers whom they must have in order to restore abandoned lands to cultivation.

Finally the question of advances in money is of growing importance. The exhaustion of the resources of those who have stayed on the land becomes daily more acute while the cost of agricultural production rises constantly. The cost of obtaining animals, manures and machines has doubled and tripled since the beginning of the war and has not reached its limit. Therefore lack of money is one of the chief agents which cause the abandonment of lands.

The Minister of Agriculture considers that in order to improve the situation in this respect the moment has come to employ to a greater degree the help of agricultural mutual credit, which has at its disposal resources relatively considerable. Unfortunately the greater part of these resources are, owing to the war, unemployed, first because a large number of the agriculturist members of the mutual aid societies have been mobilized and cannot call upon the funds; and secondly because the administrators and staffs of the societies, being themselves mobilized, can neither still keep their doors open nor be responsible for the necessary active propaganda in their neighbourhoods. In order to meet these difficulties the new law authorizes those municipal councils of *communes* which shall take charge of abandoned lands to borrow directly from the funds of their local and agricultural credit societies the necessary sums for the execution of the work of restoring these lands to cultivation. They can pay the loans back either to the Committees for Agricultural Action, when these undertake the transaction, or to some other party. The loans will be made to the *communes* on the terms most advantageous to them and to the interested agriculturists. The rate of interest demanded by the district societies will not be more than 1 %: if there be added to this a small commission taken by the municipalities in return for the labour of direction and the risks of the transaction, it will generally be possible to lend at the rate of 1 ½ % or 2 % interest, money which can be repaid to the Committees for Agricultural Action and those commissioned by the *commune*. It is true that the communal budget will, within an interval of six months of the harvest, be liable to repay the loans made to it; but it is very probable that such a reduction will have been made in the general costs that the harvest will almost always suffice to cover the sum of the advances.

This analysis of the working of the projected law makes clear its somewhat complicated mechanism, and at the same time explains the absolute urgency of preparing at once for its enforcement if it be desired that it affect usefully the autumn seedtime. The work to be done will take long, and the government believes that it can be undertaken immediately, even before the law is voted. It should consist first in taking a precise

census in each *commune* of all workable land habitually cultivated and not sown this year. Such census having been made the municipalities should review the different categories of land capable of being restored to cultivation with the aid of the provisions of the new law, and place them in order of priority. This work should be done in conjunction with the Committes for Agricultural Action, who should determine what are the most practical modes and means of cultivation.

The representatives of the commune should not rest content at this point: they can at once enter into relations and negotiations with the cultivators or their families, exhorting them to make new efforts which will be seconded, or agreeing with them as to the conditions of a requisition if one should be necessary. Requisitions should appear as benevolent measures of relief, not as disciplinary measures. The conditions in which they are to be made will be under the control of the *préfets*. It is thought very probable that in many cases the semi-official proceedings will produce immediate effects : they may at once determine many discouraged landowners to resume cultivation or seek for tenants.

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THE IMMIGRATION OFFICES OF THE NATIONAL OFFICE FOR AGRICULTURAL LABOUR. — *La main-d'œuvre agricole*, Paris, September 1916.

In May 1915 the first immigration offices of the National Office for Agricultural Labour were formed, in order to facilitate the introduction of foreign agricultural labourers by issuing to them permits to sojourn, which take the place of passports and give the right to travel by railway at half fares.

This organization increased the immigration of foreign agricultural labour, because it did away with the cost of a passport and gave workmen travelling advantages.

It came to serve industry also when the Minister of the Interior extended the benefits of the permits to labourers other than agricultural, in that he commissioned the National Office to issue to them permits to sojourn.

The service, at first annexed to the offices of the special commissaries of police, gradually developed. The National Office delegated agents charged to look after its interests and appropriate premises were arranged for them. To the simple function of issuing permit cards that of hiring labour was added, and this will be the chief object of the offices if, according to a wish formally expressed by all taking part in French agriculture, the National Office for Agricultural Labour become a permanent institution.

The organization now comprises the offices of Hendaye (Basses-Pyrénées), Cerbère (Pyrénées-Orientales) Cette (Hérault) and Marseilles (Bouches-du-Rhône), all managed by agents of the National Office for Agricultural Labour ; and stations at Tramezaygues (Hautes-Pyrénées), Fos (Haute-Garonne) Bourg-Madame and Le Perthus (Pyrénées-Orientales), Menton and Fontan (Alpes-Maritimes), Larche (Basses-Alpes), Aiguilles (Hautes-

Alpes), Madame, Cols du Mont Cenis and Cols du Petit Saint Bernard (Savoy), where the issue of permit cards is guaranteed by special commissaries of police or policemen. The offices are administered in accordance with the following rules which have been approved by the Minister of Agriculture :

" The immigration offices of the National Office for Agricultural Labour are managed by its agents, controlled by the special commissaries of police.

" These agents are explicitly forbidden to accept the least fee from anyone whatsoever.

" They are charged to issue to labourers following an agricultural calling (on farms or in forests) permits of sojourn which render passports unnecessary and give the right to travel for half fares on the great French railway systems.

" Half fares are accorded to the labourers, in order that they may go to the place of their work, when they have such a permit card together with a certificate that they have been hired endorsed by the mayor of their employer's commune. When they cross the frontier they should therefore be allowed to retain the certificates and letters which they carry, when these have been *visé*.

" Half fares are also accorded to them in order that, at the expiry of their contract, they may go from their first employer to another, so long as they are provided with a new endorsed certificate of employment ; and in order that they may return to the frontier, so long as they are provided with a certificate, likewise endorsed, that their work has ended.

" The agents of the National Office also issue, at the request of the Director of the General Society, permit cards called green cards to industrial workers. These cards make passports unnecessary but give no right to travel at half fares.

" All adults above fifteen years old should have permit cards. One and the same card should be issued only to a husband, his wife and their children under fifteen.

" The cards are filled up in the offices of the National Office ; photographs of the labourers are affixed to them. They are afterwards *visé* by the special commissaries of police.

" The cards are issued at a charge of 0.50 francs.

" A card must have on it the name and address of the employer. The name of a committee may be substituted for that of the employer, such committee being subsequently responsible for the affixture to the card of all useful *visas* when the labourer has been definitely placed.

" The stocks of cards are kept in the special commissariats of police. They are remitted by the special commissaries to the agents of the National Office according as they are needed.

" An inventory of the cards in stock in the offices shall be taken before 1 March and sent to the National Office.

" Offers of work can be deposited in the immigration offices by the central service of the National Office or by the employers directly.

" When labourers who have not been hired previously to their entry upon French territory present themselves at the offices these offers shall be submitted to them. They can then be hired by the agents of the National Office, commissioned to this end by the employers, after the completest examination possible into their fitness for agriculture and the certificates of which they may be the bearers. Their resources should be sufficient to take them to their place of work.

" In the case of labourers already hired, if the agents of the National Office find them unfit for the work for which they have been hired they should refer the matter to the special commissaries of police. They should also inform the latter of the expedients for finding and hiring labour known to them.

" Constant relations should be maintained between the different offices ; for, in order to take advantage as speedily as possible of the different offers of employment, the offices in which the demand exceeds the supply, owing to insufficient immigration, should refer their excess of offers to the other offices, in order that these, if better provided, may be able in their stead to hire the required labour.

" In case of necessity the agents of the National Office may communicate the offers of employment which they hold to hiring agents, who will thus be empowered to offer their services to employees.

" The agents of the National Office shall send a copy of their accounts for the preceding month, and the counterfoils and a note of the numbers of the cards issued, to the directing body on the first of every month.

" They shall send at the same time a statement as to the condition of immigrating enterprise in the preceding month ".

At Hendaye and at Cette the immigration office is installed in a small building constructed in the courtyard of the railway-station. It has a like situation at Cerbère ; but the premises there include as well as the office a room for the vaccination of immigrants and a shelter specially arranged for women and children. At Marseillles premises have been freely placed at the disposal of the National Office for Agricultural Labour at the police station, near the Port-de-la-Joliette.

During the various periods for which the local organizations have been at work in 1915 and 1916 (1st half-year) the following total number of persons have passed though the offices and the immigration stations of the National Office :

Agricultural Labourers	Men	41,235
	Women	5,567
	Children	5,344
Industrial Workers	Men	20,572
	Women	2,372
	Children	2,499
Total	Men	61,807
	Women	7,939
	Children	7,843

A fifth immigration office will be opened at Bordeaux.

GREAT BRITAIN AND IRELAND.

FARM SERVANTS' WAGES IN SCOTLAND.

A report issued by the Board of Agriculture for Scotland gives an interesting idea of the position in regard to the wages of farm servants in Scotland. The report says:

In view of the hiring fairs which took place at the end of May, the Board obtained from their reporters specially full reports regarding the supply of labour. Almost all these reports are to the effect that the previous shortage has become more acute owing to the further calling up of men to the colours. In practically all parts of the country there is a very serious scarcity of hands, and more particularly of young unmarried men. Most farms are being worked with less than the normal staff, and some have been considerably depleted. One result of this is that men have, as far as possible, been replaced by lads under military age, many of whom are now working pairs of horses or attending to live stock. In South West Forfar vacancies have been fairly well filled so far, but it is expected that if there be further calling up of men the shortage there also will be severely felt. In Bute and Kintyre farmers managed fairly well at the feeing markets to meet their requirements, and every effort has been made to overtake the work with fewer hands and by using a greater number of agricultural implements. South Ayr is almost the only other district where it is reported that the work has been got through fairly satisfactorily, although all the farms are more or less shorthanded.

Efforts are being made in various districts to increase the amount of female assistance on the land. In South West Aberdeen women labourers are reported to be fairly plentiful, and there is little change in their wages; while in Inverness there is a distinct increase in the number of women now being employed. In North Ayr there is a fairly good supply of female workers, but in practically all other districts it is stated that the amount of female assistance available is very limited.

Over the whole country wages have advanced considerably, particularly in the case of boys and lads under military age. In Moray men's wages have risen from £2 to £5 for the half year; while in Banff it is reported also that they are up by about £3. In that county first horsemen have been engaged at from £30 to £33, second men at £27 to £28, and boys at £12 to £20 for the half year. Wages in South West Aberdeen run to £32 and £35 for grieves, first horsemen, and head cattlemen; from £24 to £26 for second men, and from £14 to £16 for boys; in Central Aberdeen the corresponding figures are £31 to £32 for foremen, £26 to £30 for second and third men, and £12 to £16 for boys; while in North East Aberdeen single men are getting from £28 to £36, and boys of 17 from £20 to £26. These wages are all for the half year. Capable single men in East Aberdeen are receiving now from

£50 to £60 per annum, while the wages of married men run from £50 to £70 with free house and the usual requisites. The report from Kincardine states that wages for the six months run from £35 to £40 for foremen, £30 to £35 for second men, and £28 to £33 for third men; cattlemen, like foremen, are receiving £35 to £40, while for youths under military age £14 to £20 is being paid. In North East Forfar wages have risen by about £2 to £3 in the half year, those for men being from £38 to £43, and for boys from £15 to £23; while in the south west part of the county the rise in men's wages is put at £1 to £2, and in those of boys able to work horses from £4 to £5. Still higher wages are returned from North and East Perth, where single men have been engaged at from £40 to £45, lads at £30 to £35, and boys at £20 to £30, all for the halfyear and with the usual extras. In the other parts of Perth there have been corresponding increases; thus in South West Perth young men capable of undertaking all kinds of farm work are receiving from £20 to £25 per half year with board and lodging, while married men are being paid 28*s.* to 32*s.* per week with free house, etc., and girls from £10 to £18 per half year. Wages of ploughmen in the Lothians run from 27*s.* to 30*s.* per week, and for other men from 27*s.* to 29*s.*, also with free house and perquisites; boys in these counties have been engaged at £9 to £16 per half year with board, etc., while the rates of pay for women are 14*s.* to 15*s.* per week with extra pay for harvest and potato lifting. An advance of from 6*s.* to 7*s.* per week has taken place in Berwick, where men's wages are now from 25*s.* to 27*s.* per week in addition to free house, etc.

In some of the northern counties a lower scale of payment prevails; thus in Orkney men have been engaged at from £14 to £18 per half-year with board and lodging, and female farm servants at £10 with the same. In Ross it is reported that from £52 to £60 per annum is being paid to first horsemen, cattlemen, and shepherds; from £44 to £50 to second and third men and from 20*s.* to 25*s.* per week to lads; in the case of the men free housing and perquisites are given in addition. The range of wages in Inverness is somewhat similar, ploughmen, cattlemen, and shepherds receiving from £40 to £65 per annum in money according to their experience, while women are paid from 2*s.* to 3*s.* per day. In the Western Isles all wages have risen by about £2 per half year. In South East Lanark ploughmen are receiving 2*s.* to 4*s.* per week more than formerly, whileshepherds are being given a bonus for the year amounting to from £3 to £5; women in that district who are able to milk are earning from £14 to £16 per half year. In Renfrew men's wages have advanced by fully £25 for the six months and women's by £2 to £3, while in South Ayr it is stated that there has been a rise all round of about 30 per cent. during the past two years. Experienced ploughmen in Dumfries have been engaged at from £65 to £70 per year with free house, garden, etc, while lads under eighteen are being paid £15 per half year with board in addition.

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SALVATION ARMY HOLDINGS AT BOXTED. — *The Journal of the Board of Agriculture*. London, May, 1916.

The attempt which the Salvation Army had been making to found a small holdings colony at Boxted, in Essex, has been abandoned. The scheme originated in the desire of the late Mr. George Herring to try the experiment of placing men from the towns on the land. In 1905 and 1906 Mr. Herring discussed his ideas with the late general of the Salvation Army, and decided to place at his disposal the sum of £40,000 for the purpose of the experiment, together with a further sum of £60,000 if the first experiment should prove successful. In October, 1906, the estate at Boxted, near Colchester, comprising just over 400 acres, was purchased ; the cost, including purchase money and conveyancing, amounted to £17 10s. an acre. For the purchase of the estate Mr. Herring advanced £8,000. The land was at once entered upon and contracts were made for erecting houses, some of which were partially built when Mr. Herring died in November, 1906. His arrangements with the Salvation Army had not been embodied in any definite trust deed during his lifetime, but by a codicil to his will he directed his trustees to pay over the balance of the £40,000 (viz., £32,000) to the Salvation Army on certain conditions, to be used for the settlement of the estate.

Scheme of the Chancery Court. — During the 3 years following Mr. Herring's death a great deal of litigation took place between the Salvation Army and the trustees appointed under Mr. Herring's will, which was finally brought to an end in June, 1910, by the enrolment of a scheme by order of the Court of Chancery. As this scheme determined the conditions under which the experiment at Boxted should be carried on it is important to consider its terms. The objects of the scheme were described as follows : —

" To promote the settlement of persons who are in poor or needy circumstances or unable to make a livelihood without assistance and who are British subjects upon land in Great Britain, with a view to their supporting themselves by agriculture or other rural industries and to their ultimately acquiring their holdings in fee simple or for some other substantial estate or interest, as a permanent means of maintenance, and in general to assist indigent British subjects to become self supporting within the limits of the British Isles by means of agriculture and other rural industries ".

It was Mr. Herring's intention that the money, after being used by the Salvation Army for the colonizing experiment, should be paid to King Edward's Hospital Fund for London. The scheme accordingly provided that money expended upon settlers should, so far as practicable, be ultimately recovered from them, and that a payment equal to one twenty-fifth of the total amount received by the Salvation Army under the will should be paid annually by the "army" to the treasurer of the hospital

fund until the whole amount had been so paid. It was also provided that the experiment would be brought to an end if a payment to the hospital fund became 3 years overdue or if the audited accounts showed that not less than £10,000 had been lost on the working of the scheme.

Settlement of the Estate. — During the 3 years and 8 months which elapsed between the purchase of the estate and the approval of the scheme by the court, the erection of the buildings and the preparation of the land for small holdings were carried on with borrowed money. By the end of 1910 the scheme was in full operation and about 50 families were settled on the estate. As the tenants had no capital it was arranged that until they harvested their first crop each should receive an allowance of 10s. per week, with an addition of 1s. for each child. This maintenance allowance was added to the capital value of the tenant's holding on which he eventually paid rent equal to 5 per cent. of the total amount. The holdings varied between 4 and 8 acres in size, and the valuation of the holding, house, fruit etc., together with the money advanced for maintenance, amounted to between £500 and £550. The tenants, therefore, were to pay rents of about £5 an acre inclusive.

The settlers in the first instance worked under supervision. Many of them had been drawn from towns and, although in some case, they were accustomed to cultivating a small garden, most of the men had no experience of market gardening. Throughout the estate a system of intensive cultivation was followed. In addition to the usual market garden crops, each holding had been planted with about an acre of fruit, both tree and other fruit, and was provided with a two-sty piggery. A co-operative plan was at once established both for marketing produce and buying supplies. The tenants were not bound by any formal agreement to sell their crops through the medium of the society, but there was an understanding that they should do so. The men, having had no previous experience of co-operation, were frequently tempted to sell their produce independently, and there was evidence of an anxiety to break away from the society whenever they thought they could secure a better price by selling individually.

Disaffection of Settlers. — Many of the men proved unadaptable to country life. They were continually desiring the conditions and interests of the town. Some, who had worked satisfactorily while under supervision, proved quite unfitted to be their own masters, and neglected their holdings. In September, 1911, a committee of enquiry, appointed by the "general", reported that out of the 54 tenants in occupation, only 9 had proved their capacity to make themselves successful small holders. Of the remainder, 9 were considered incapable of maintaining themselves and the prospects of 36 were considered doubtful. The Salvation Army, therefore, decided to give the 9 successful tenants the option of taking up leases of their holdings, and to dismiss the 9 failures. With regard to the 36 doubtful men it was felt that a mistake had been made in placing inexperienced men in the position of tenants without adequate training. These men were, therefore, invited to enter into new agreements with the «army» in accordance with which they would receive a weekly wage of 14s., together

with a cottage, until such time as they showed themselves capable of maintaining themselves as small holders. These terms produced a storm of indignation, and 17 men definitely refused to accept them. Eviction orders were obtained against 7 of the men, who were turned out of their houses by force.

In January, 1912, the Charity Commissioners held an enquiry on the spot, lasting 5 days. The principal complaints made by the tenants were that the land was unsuitable for small holdings; that the prices realized for produce through the co-operative society were far too low; that for a considerable time there had been no expert adviser, as promised in the original prospectus; that some of the cottages, which were built of concrete blocks, let in the damp; and that the officer of the Salvation Army in charge of the colony had given bad advice and had been too autocratic in his methods. As a result of the enquiry the Charity Commissioners came to the conclusion that no case of actual mal-administration had been made out, and that as the "general" of the Salvation Army was invested by the scheme with absolute control there was no case for government interference.

During the difficulties above described, which extended over some 12 months in all, the operations of the settlement were so disturbed that the success of the year's (1911) cropping was very much affected, and additional men removed as a consequence. In the end about 24 men were retained upon their holdings, and of this number 29 have obtained from the trustee of the estate a lease of their holdings for 999 years. Many of these men have not been able since obtaining their leases to pay their rent regularly, and as the rest of the estate has been farmed at a loss, owing partly, no doubt, to the way it has been sub-divided, the Salvation Army have been unable to comply with the terms of the scheme respecting the annual payment to the hospital fund, and the scheme has consequently had to be wound up.

Causes of Failure. — In view of the importance of this experiment, it is interesting to analyse, as far as possible, the causes of failure. The scheme suffered very greatly by the decease of Mr. Herring. After the land had been purchased and a beginning made with the erection of the cottages, 3 years were expended in costly litigation, during which time the estate was being worked on borrowed money. The result was that the £40,000, which it was originally estimated would be necessary for carrying out the scheme, was reduced to £32,000, all of which was expended before the men were actually settled on the land. Thus there was no reserve fund to meet the failures which were inevitable in an undertaking of this kind. These factors, which very greatly influenced the success of the scheme, are peculiar to this particular project. There are, however, other conclusions of wider application to be drawn from this failure. The land, though reasonably good, was not uniformly so, or equally suitable for successful cultivation by the type of settlers; the expert advice which was provided proved to be insufficient to make up for the lack of knowledge and application of many of the settlers; and the men, being inexperienced in market gardening, were not fitted to become tenants without a considerable period of

training. Moreover, the men selected proved, in many cases, quite unsuited to country life, though they could probably have been weeded out in a sufficient period of probation; the Salvation Army were obliged, under the terms of the scheme, to select men with no capital, and therefore had to provide them with maintenance allowances for the first 12 months and more, which sum, when added to the capital value of the holding and house, made the rent higher than some of the tenants were able to pay.

UNITED STATES.

THE ORGANIZATION OF AGRICULTURAL PROPAGANDA IN THE UNITED STATES. — Report of the Secretary for Agriculture in the *Year Book of the U. S. Department of Agriculture*, 1915.

In the United States, Congress recently approved a plan for the reorganization of the Federal Department of Agriculture which comprised, among other things, the formation of an especial service called *States' Relations Service.* The chief function of this service is to keep the government agricultural colleges in constant touch with experimental stations, and to secure the application of Federal laws concerning State institutions, in the matter of agricultural experiment and propaganda, by co-ordinating the activity of the institutions with that of the department.

The law of 8 May 1914 as to agricultural propaganda organized on a vast scale the teaching outside the schools of agriculture and domestic economy to the rural population. It established the strict collaboration of Federal agencies with those of the different States as regards the constitution and the working of the service of propaganda. By this law the Federal Department is bound to help these agencies, not only in drawing up programmes of the work which must receive common approval, but also in carrying them out in the most effective way possible. Moreover the law provides for the formation in each State of an organizing centre, which represents it and is responsible both to the agricultural college and to the Federal Departments.

In the first year for which the law was in force great efforts were made to bring into being and to perfect the administrative machinery. All the States conformed to its provisions. In each of them an agricultural college was assigned for the reception and administration of the necessary funds. The chosen institutions made the subdivisions of services or the separate services, on which everything having reference to the teaching of agriculture or domestic economy depends. In 36 States an especial officer directs these services, generally with the title of director; in four he unites with this office that of head of the experimental station or the agricultural college. The chief features of the organization are: 1) the county agricultural agents; 2) the boys' and girls' clubs; 3) the itinerant schools

and the work of encouragement carried on by the specialists of the agricul tural colleges and of the department.

1) *The County Agents.* — Before the law was voted the colleges had accepted one of the fundamental bases of the system which the department enforces. In the last twelve years, it has been possible to form a full estimate of the value of the county agent, whose mission it is to inform the rural populations, directly by his personal visits to farms and farmhouses, of the results of practical experience and scientific research. It is therefore essential to form in each county permanent centres for propaganda, under the direction of a competent agent, which shall at once represent local rural society, the agricultural college and the Federal Department. Thus the needs of the different rural communities can be exactly determined, and the speedier and more effective aid of the State and the Confederation can be assured to them. A large part of the funds, obtained from the Federal Government, the governments of the States or the local institutions, has served to maintain in activity and develop the organization of county agents of both sexes. At the end of 1915 more than 1000 counties were employing men in this service, and 680 counties in 15 Southern States had an additional staff of 355 women.

Since a single agent could not visit all the farmers in a county the organization of intermediary agricultural groups is very important. The groups of this class conform to two general types. The first is constituted by the county associations, also called " farm bureaux ", and its work is to finance the agent locally, to assist in nominating him and to second his efforts to forward agricultural interests. The members of such associations are not recruited solely from the farmers but include in many cases persons of the commercial, industrial and professional classes. This fact has given rise to special problems ; for if the support and sympathy of persons of other classes are desirable for farmers, it is none the less indispensable that they should themselves control and determine the character and the functions of the organizations.

The second type is that of the small local association. When there are a considerable number of these in a county they are federated to form a county organization. Neither type of intermediary group is however as yet absolutely fixed and both are in the experimental stage.

The work incumbent on county agents is very varied : a few figures will give some idea of its scope. In the 15 Southern States direct demonstrations were given during the year on 105,000 farms, and 110,000 children of both sexes benefited by the instruction imparted by the agents. About 500,000 visits were made to farms.

It is reported that the demonstrations bore on every branch of southern agriculture. Nearly 3,000 kilos of manure were used under the direct instruction of the agents and 13,000 thoroughbred animals were bought in order to improve breeding. Under the direction of specialists the agents organized the campaign against cholera among pigs and taught the farmers to make preventive injections, 118,000 pigs being vaccinated. Campaigns against other diseases of livestock were not neglected :

the agents vaccinated 26,000 animals against carbuncles, and 2,000 ponds for prophylactic baths were constructed under their orders. They gave moreover much advice as to the rational development of the dairy industry.

By their means successive terraces have been made on more than 75,000 slopes in order to prevent their erosion ; tree-stumps which impeded the cultivation of fields have been removed on thousands of farms ; 65,000 acres of land have been drained ; nearly 3,000 model kitchen gardens have been cultivated and the farmers have bought 132,000 improved tools or machines. About 500 rural communities have been organized for co-operation in breeding, in the purchase and sale of products and their distribution, in the sale of crops and in the improvement of agricultural methods — not to mention agricultural credit and the beautifying of rural life.

The efforts of the women on the staff have brought about the destruction of flies and mosquitoes, and the sensible cooking of food in the homes, and have influenced poultry breeding and the sale of eggs. The women instructors have visited about 50,000 farmhouses.

In the Northern and Western States, where this form of propaganda is comparatively new, the number of agents rose in 1915 from 219 to 350. They have formed 875 local organizations, known as farmers' clubs, which are associated for the improvement of crops, breeding, the control of dairy production and the purchase and sale of products. They have given 35,000 demonstrations bearing on agriculture and the care of livestock; and they have visited 76,000 farms, giving practical information in meetings attended by 1,200,000 persons, and have contributed to the development of agricultural teaching in 4,600 schools. About 72,000 farmers and their families have followed short courses of instruction or attended classes in the itinerant schools. According to the figures furnished by the agents themselves 600,000 acres of selected maize, 280,000 acres of oats, 17,000 acres of potatoes and 85,000 acres of lucerne grass have been planted on their advice. Nearly 7,000 registered stallions have been procured for the farmers ; 300,000 pigs have been vaccinated against cholera ; and 2,000 farmers have learnt how to mix manures. Finally the agents have helped more than 2,000 farmers to keep their farm accounts, and have established offices by means of which 2,300 of them have obtained the labour they needed.

2. *The Boys' and Girls' Clubs.* — The formation and development of associations of boys and girls for agricultural objects had received attention from the Federal Department and the agricultural colleges even before the law of 1914, and were still pursued after the law had been promulgated. In the Southern States this form of organizing activity is within the scope of the county agents ; in the other States it is independent of them. It brings the agencies for propaganda into contact with the school teachers who co-operate in the formation and the direction of the clubs.

In the year under review 110,000 boys and girls were enrolled. Of the 60,000 boys many, practising the teaching they received, grew winter vegetables for the improvement of the soil. Many of them were also grouped in associations for the breeding of pigs and poultry. The girls were

taught to look after a kitchen garden and, especially, to cook and preserve fruit and vegetables.

In the Northern and Western States the number of new members of the clubs surpassed 150,000. The clubs have here aimed principally at the growing of maize and potatoes, gardening, and the cooking and preserving of vegetables and fruit. By their means succession of crops, treatment of the soil and rational distribution of work have been practised.

The members devote their net profits to buying pedigree stock — pigs, sheep and poultry —, and agricultural or domestic machines and utensils. Many of them even buy plots of ground, thus acquiring early the habit of saving and learning the dignity inherent in proprietorship of land. At 938 public demonstrations of methods of making preserves 118,000 persons, including more than 50,000 women and 10,000 men, were present. The short courses, which were opened in the agricultural colleges towards the middle of the winter, have been followed by 1557 members of the clubs; and the usefulness of the instruction given is so well recognized by the rural population that of this number 968 had their fees paid by local residents or by institutions or societies.

3. *The Activities of the Specialists.* — The agricultural colleges have for long conducted a propaganda by means of their professors and the staff of the experimental stations. These activities which, initially, were quite accidental, have become, by reason of the growing interest in agriculture of the Federation and the States, more and more considerable and now absorb an important share of the time of these specialists. For some of them, in several establishments, they have actually come to constitute their entire duty. It is the part of the specialists to second the county agents in influencing the rural population directly, to advise and support them, to give practical courses of lectures, to give demonstrations on especial points, to prepare publications, to talk to the farmers at the meetings and to comply with requests for information. It is incumbent on them to collect generally all possible information regarding their department, especially such as emanates from the experimental stations, to put it into an easily accessible form, and to distribute it to the farmers, either directly or by means of the county agents.

The Federal Department also employ experts to collaborate with the county agents, notably in the matter of dairy-work, the care of animals, the fight against cholera among pigs and ixodes among cattle, the sale of agricultural products, agricultural economy and the preserving at home of fruit and vegetables.

4. *The Financial Basis of the Agricultural Propaganda.* — In 1916 the funds of the Federal Department available for all these objects amounted to $1,200,000, to which $1,080,000 granted to the States by the law of 1914 must be added. Further a sum of $2,653,000 in round figures has been allotted by the States and the local institutions. The total sum available for agricultural propaganda in 1916 is therefore $4,933,000, of which half will certainly be absorbed by the cost of the agricultural instructors.

The Federal Government aims consistently at developing the organization of the county agents by appeals to local resources. This system is firmly established in about a third of the counties — a result which has been possible because the government actively supported the service until the country population was thoroughly convinced of its usefulness. The other two thirds of the counties have not yet reached this stage of organization and could not do without the stimulating influence of the Federal Department and the agricultural colleges.

RUGGERI ALFREDO, gerente responsabile.

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Part I: Co-operation and Association

GERMANY.

THE CO-OPERATIVE SALE OF LIVE STOCK IN GERMANY.

SOURCES:

HORST (Hans): *Die genossenschaftliche Viehverwertung in Deutschland* (The Co-operative Sale of Live Stock in Germany), *Landwirtschaftliche Jahrbücher*, Berlin, Vol. 48, part 1, 8 July 1915, page I + 169.

§ 1. THE OBJECT OF THE CO-OPERATIVE SALE OF LIVE STOCK.

The members of the co-operative societies for the sale of live stock are recruited almost entirely from the holders of small and medium-sized farms. Except in Pomerania, East Prussia and the district of Luneburg (Hanover) the large proprietors have held themselves nearly wholly aloof from this organization; in the rest of Germany they are represented among the members of these associations only exceptionally. This is due to the fact that smallholders possess more live stock than large landowners and therefore are more in need than they of economic protection. The large landowners are moreover able to take their animals to the markets themselves and need not run the risk of being defrauded by dealers. Further the co-operative societies for the sale of live stock undertake to dispose of the consignments of private individuals.

It is true that the large landowners have not taken full advantage of this latter opportunity because they find it more convenient to sell to dealers directly. The following figures show for Prussia the value of the consignments of private individuals to the sale offices of the co-operative societies:

	1909 Marks (1)	1910 Marks	1911 Marks	1912 Marks
To the central selling establishment at Berlin.	2,068,219	2,100,000	2,887,217	2,072,883
To the sale office at Dantzig . . .	187,776	191,510	194,493	230,871
To the sale office at Hanover . . .	—	177,067	472,599	582,993
To the sale office at Essen	—	—	—	401,475
Total . . .	2,255,995	2,468,577	3,554,309	3,288,222

The central establishment for the sale of live stock heads the list because most of the members of its society are recruited from the great landowners of the eastern provinces who therefore are financially interested in its success. Although large proprietors do not show a keen interest in these associations it is none the less true that they derive from them advantages which cannot be undervalued. In most cases animals belonging to one owner are not simultaneously ready for delivery to the butcher. If therefore the owner do not wish to abandon the profit attendant on the simultaneous sale of a number of animals he must either continue to feed beasts which are already fat — that is incur unnecessary cost — or he must make up his mind to sell beasts not yet fattened to the desired point and bringing him in only a slight return.

These drawbacks are aggravated by the fluctuations in market prices, owing to which one owner who markets a large number of animals runs a heavy risk which can be avoided by means of the gradual sales conducted by the associations.

a) *Animals for slaughter.* — Pigs figure most largely in co-operative sales. The number of them sold in 1912 by all the co-operative societies and the isolated consigners of Prussia was 646,402 as against 16,401 horned cattle, 53,102 calves and 21,999 sheep.

It is also to be noted that in 1912 of one thousands pigs slaughtered in Prussia fifty-five had been bought from co-operative societies, whereas of a thousand heads of cattle slaughtered only five had been bought from them. This is due to the fact that the small farmers, who are the best supporters of co-operative societies, fatten pigs almost exclusively.

The following figures show the total sales of cattle :

	Prussia Heads of cattle	Bavaria Heads of cattle
1910	11,215	5,674
1911	13,520	5,134
1912	16,401	4,153

(1) 1 mark = about 1*s* at par.

The following figures show how, in Prussia and elsewhere, pigs predominate among the animals sold:

	Prussia Pigs —	Other Parts of Germany Pigs —
1910	379,214	25,369
1911	618,842	33,393
1912	649,402	40,278

In Prussia these figures for Hanover only amount to 50 per cent. of those for the whole kingdom.

The co-operative sale of calves is attended with far fewer difficulties than that of mature animals. The following figures show the number of calves sold:

	Prussia Calves —	Bavaria Calves —
1910	43,797	61,218
1911	50,996	64,101
1912	52,102	66,930

Of all calves slaughtered in 1912 two per cent. were sold co-operatively in Prussia and ten per cent. in Bavaria.

The co-operative sale of young pigs, which for some years has been successfully undertaken by certain Hanoverian co-operative societies, is attended with difficulties of a special order. We will return to this subject.

The co-operative sale of sheep has little importance because of the secondary place which mutton takes as an article of diet — it meets only two per cent. of the need — and because it is chiefly large landowners who are sheep farmers. Altogether in Prussia 20,096 sheep were sold in 1910, 17,683 in 1911 and 21,999 in 1912.

b) *Animals for breeding.* — Several co-operative societies have undertaken in addition to the sale of animals for slaughter that of breeding stock, for the following reasons:

a) owing to the lack of official price lists there were in the markets abuses which urgently needed remedy;

b) the dealers sought to assimilate breeding stock to animals for slaughter, in order to cheapen the former;

c) the sale of breeding stock by co-operative societies might have a happy effect in directing breeding activity.

It is true that the co-operative sale of breeding stock encountered grave difficulties, which arose first from the fact that stock of this kind is fitted only for detailed sale; and secondly from the less ability of the co-operative societies, as compared with dealers, to determine the aptitudes of stock for specialized breeding with a view to production, whether of meat or milk or draught animals, and their less familiarity with the needs of farmers.

The co-operative societies sought to overcome these difficulties by undertaking first the sale of those breeds of cattle of which the aptitudes to certain uses were already established. Such are particularly the breeds of the March, which thanks to the climate and fortunate crossings have become remarkably fitted for fattening and for dairy production, and the cattle of the mountainous districts of Upper Bavaria, which make good draught animals. The reliability in these respects of these breeds is such that a sale based only on weight and age can make the purchaser sufficiently sure of procuring animals having certain fixed aptitudes, from which he can obtain the results on which he counts.

The sales by co-operative societies of breeds of this type are continually on the increase. It is true that they are frequently effected by societies not originally in touch with co-operative societies for the sale of live stock, properly so called. But these societies, for the most part, have sought in the event to attach themselves to federations of such selling societies.

There are co-operative institutions of this type in East Frisia, in the districts of the Associations for Breeding Dutch Cows (Hollander Herdbuchgenossenschaften), in East Prussia, in the Oldenburg Wesermarsch, in Jeverland, in the district of the South German Breeding Associations, and in Schleswig-Holstein.

On the other hand, to meet the needs of holders of small and medium-sized properties, offices of information have been founded in order to let farmers know where they can buy cattle suited to their needs. Such offices have been established by the Chambers of Agriculture of East Prussia, Schleswig-Holstein and Bavaria. Co-operative societies also often themselves sell the thin stock of their members by auction.

It has been attempted further to encourage the sale of breeding stock by forming for it especial markets. In this connection particular mention should be made of the market for thin stock at Friedrichsfelde near Berlin, which was founded by the central establishment for the sale of live stock. This establishment proposed at first to found a central office which should fix the channels of the trade in live stock for the whole country. In order that its situation might be as central as possible it was decided to place it in Berlin. However it had to be recognised that the centralization of the market raised many internal difficulties. The governement had to be brought under contribution and the market had to take on an official character, which emancipated it from its dependence on the central establishment. The latter thereupon formed a commission agency in the markets, hoping the farmers would employ it in making purchases and sales. At first it did indeed do much business, but subsequently the farmers renewed their old connections with the dealers. In 1912 the liquidation of the central establishment for the sale of live stock in Berlin was necessary. The market for thin stock on the other hand has become, thanks to its central position and the excellent condition of its stalls, the most important place in Germany for the sale of live stock.

Young Pigs.— We have already alluded to the fact that the co-operative sale of young pigs meets with special difficulties, connected particularly

with the business of valuing the animals. An attempt was made to solve the problem by arriving at an average value based on total weight and on age. At first the points of the animals were merely estimated at sight but the resultant valuations gave little satisfaction. More certain criteria were then sought and it was decided to weigh the animals as soon as they reached the station. When a farmer delivered a lot of animals of equal quality his whole consignment was weighed and the average weight of a single animal then calculated. This procedure proved to be very superior to mere valuation at sight ; but it had the drawback that it left all the particular points which might play a decisive part in fixing price to the judgement of the valuer.

To obviate this disadvantage a scheme for valuation was established by means of which the points which fix prices are classified automatically. This system seems, in spite of its complications, to have proved of practical use.

For the rest the organization of the co-operative sale of young pigs is comparatively simple. A co-operative society undertaking it needs however a working capital of at least ten thousand marks. This is due to the fact that it is especially operations in credit which are involved. Small dealers who appear as purchasers on the markets are well known to receive credit from large dealers, and co-operative societies should accomodate themselves to this fact if they wish to compete with profit. With such end in view they had recourse to the central establishment for the sale of live stock in Berlin which undertook to buy young pigs at a fixed price and resell them at its own risk. Every year the societies settle their accounts with the central establishment.

The co-operative sale of young pigs has in its development and general organization much analogy with the sale of animals for slaughter. The large organizations for the co-operative sale of young pigs, which are found exclusively in the province of Hanover, are invariably independent, and have rendered the delivery to themselves of the products of their members obligatory.

Besides these co-operative societies for the sale of young pigs, properly so called, there are in Hanover a series of co-operative societies for the sale of cattle which, in addition to their main object, sell young pigs. Altogether there are some fifteen co-operative societies in Hanover which undertake the sale of young pigs. They sell in all parts of Germany about 50,000 young pigs a year.

§ 2. Organization of the co-operative sale of live stck.

a) *In the country.* — The working of a co-operative society which sells by commission is comparatively simple. The members are bound to give the administrator some days' warning of their deliveries of animals, which, after such notice has been given, cannot be sold elsewhere. After he has

received the entries the administrator informs the central offices, to which the co-operative societies are affiliated, of the number and kind of the animals and other particulars. These offices then direct him as to the markets in which the animals will in all probability fetch the best prices.

The animals should be brought to a receiving office situated as centrally as possible within the co-operative society's sphere of action. Waggons which take them to the different stations are sometimes also used. When a co-operative society works within a large territory it makes up loads of distinct classes of animals and despatches them to different markets.

For sale by commission the animals are marked and then entered on the commission lists. The co-operatve society keeps one copy of the list, and the other is sent to the commission agent of the market who adds to it the weight of the animals when sold and the price paid for them. As soon as the money has been received the costs are deducted and the net price is paid to the members of the co-operative societies. Of late it has often happened that accounts have been settled by the medium of the savings and loan banks.

Selling is far more difficult among co-oprative societies which buy stock for sale : these are met with especially in the province of Posen.

The difficulty lies, as has been said, in valuing the animals delivered. For this there is a special valuation committee, composed of the administrator, the valuer — generally a butcher — and a member of the superintending council. Valuation is based on the classification customary in markets for the sale of live stock for slaughter. The fact that an animal is placed in a certain class gives, together with its weight, a basis for the subsequent payment. When a member expresses dissatisfaction with an estimate he can, by paying a fine a 50 pfennigs (1) and making himself responsible for all costs, have his animal sold by commission.

The insurance of the animals against accidents and the choice of the administrator are two matters important to the success of the co-operative sale of animals in the country. The administrator is most often a native of the district concerned and he receives for his exercise of his office, which generally is accessory to other avocations, 0.5 per cent. (in the biggest co-operative societies 0.3 per cent.) of the money paid to the society.

b) *In the market.* — The organization in the market aims at grouping together the scattered co-operative societies sending consignments to it, in order to strengthen their resistance to competition ; at receiving the animals on their arrival and caring for them ; at superintending selling by commission agents ; at studying the needs of the market in the matter of quality and quantity ; and at effecting a reasonable distribution of the animals should the market be encumbered.

The first co-operative societies sought to sell by the medium of a commission agent in any market : the large amount of resistance with which they met obliged them to combine. An impulse to draw together

(1) 50 pfennigs = about 6*d* at par.

was given by the central association for the sale of live stock in Berlin which sent a delegate to take charge of its business to every market frequented by co-operative societies. The co-operative societies were to have made a declaration as to their consignments which the central establishment would have distributed among the different markets. This attempt at centralization did not succeed, and at the instigation of the Chambers of Agriculture in all the provinces concerned sale offices were instituted and called upon to undertake the same task on a more restricted scale. Then however a lack of centralization was felt, in spite of the increasing solidarity of the co-operative societies as a whole.

Experience has shown, it is true, that these sale offices amply suffice for the western markets, but the case is quite other in the eastern provinces where, as a consequence of the lack of outlets, almost all the co-operative societies have had to continue to have recourse to the services of the central establishment for the sale of live stock at Berlin.

§ 3. Present development of the co-operative sale of live stock.

The co-operative sale of live stock is economically profitable to individuals and to the nation.

As regards individuals it renders producers more independent and, by eliminating dealers, protects their farms from cattle disease. It protects them also from loss by the untimely sale of fattened animals because it enables them to deliver their stock as soon it is ready. Finally by its means they receive the true price of their animals, for the general costs of the co-operative sale of live stock are little in advance of those of ordinary trading.

As regards national economy, production has been brought into better correspondence with the needs of the market; although less so than in Denmark where, as a consequence of co-operative sale, it has been possible rapidly to build up a stable breed of pigs which is entirely suitable for export.

It is possible to affirm that precisely in the province of Hanover, in which more than half the co-operative sales of all Prussia take place, the production of pigs has increased since 1883 by 366 per cent. while it has increased by only 143 per cent. in the rest of Germany.

This example shows that in spite of its advantages the co-operative selling of live stock has not developed equally in all parts of the country. Its growth is greater or less in accordance with the character of the population, the necessity of finding a market for the live stock and the attitude of the State to co-operative effort. In Prussia the government has hitherto maintained an attitude of much reserve. The Bavarian government, on the other hand, definitely favours the development of co-operative selling societies. In the Grand Duchy of Oldenburg the efforts which have been made in this direction have met with no support from the government.

a) *Prussia.* — Prussia is the cradle of these co-operative societies of which it possesses a large number. The first of them was founded by the peasants of Schleswig-Holstein, but it is in the province of Hanover that co-operative selling societies really had birth. The example of Hanover was soon followed by the provinces of Westphalia, the Rhineland, Pomerania, East and West Prussia, Silesia and Saxony.

The following figures, taken from the data of the Prussian *Landesökonomiekollegium*, show the development of the business of all the co-operative societies for the sale of live stock :

Number of Animals Sold.

Year	Horned Cattle	Pigs	Calves	Sheep	Value in Marks
1906	6,699	106,087	16,649	7,552	16,623,783
1907	9,649	217,903	25,351	9,663	26,734,902
1908	13,231	255,218	34,506	16,759	34,001,453
1909	14,296	267,999	33,512	20,903	38,974,591
1910	12,838	379,214	43,797	20,096	49,837,431
1911	13,518	618,842	50,996	17,683	68,700,391
1912	16,401	649,402	53,102	21,999	88,376,716

The following figures show the distribution of business among the different provinces in 1912 :

Provinces	Number of Co-operative Societies	Marks
Hanover	90	42,266,226
Pomerania	18	14,479,076
Schleswig Holstein (1)	5	11,278,965
Posen	9	5,626,516
Westphalia	29	3,747,571
West Prussia	8	2,609,260
East Prussia	14	2,554,684
Rhine Province	11	1,976,141
Saxony	5	1,588,755
Silesia	2	127,470
Hohenzollern	1	49,149

The business done by the central establishment of Berlin in 1912 is represented by 2,072,883 marks.

b) *Oldenburg.* — In spite of a great wealth of live stock, and in particular a superabundance of pigs, the co-operative selling of live stock began

(1) In addition to the consignments of individuals to the selling office at Hamburg.

here only in 1908. The need for it was felt less acutely because live stock was easily sold in Bremen and the industrial regions.

The following are the data as to the co-operative societies:

Year	Number of Co-operative Societies	Marks
1908	1	733,761
1909	1	1,940,449
1910	1	2,581,267
1911	4	4,073,128
1912	6	6,122,071

It has been impossible to give exact figures as to the kinds of animals sold, but it is certain that the business was especially concerned with pigs. The prospects for the co-operative selling of live stock in Oldenburg are extraordinarily good.

c) *Grand Duchy of Baden.* — Here the production of live stock is exactly sufficient for the feeding of the population, but the configuration of the country makes impossible the sale of the animals it produces within its limits.

The Baden Chamber of Agriculture and the Union of the Baden Agricultural Co-operative Associations therefore decided in 1910 themselves to organize selling. Two years later the enterprise of seven co-operative societies had already sold 258 heads of cattle, 1,554 pigs and 312 calves, for a total sum of 358,000 marks. In the same year the co-operative societies founded by the Union of Co-operative Associations and the selling office of Freiburg were taken over by the Chamber of Agriculture. The organization is still simple : only one co-operative society has rendered it obligatory for its members to deliver their products to itself. The State in 1913 allotted a subsidy of 3,000 marks to the organization.

d) *Bavaria.* — Here the co-operative selling of live stock differs fundamentally from that in Prussia and in the rest of the country except Wurtemberg, owing to the fact that Bavarian farmers breed especially horned cattle and only few pigs. Moreover an innate distrust of every innovation has given these organizations a particular character, as yet somewhat rudimentary.

Of eighty-nine of them, which formed their total number in 1912, only five have made the delivery of live stock to themselves obligatory. The amount of businss done is small. It must be added that in Bavaria the large landowners have held themselves entirely aloof from the movement. If in spite of all these difficulties the co-operative selling of live stock is developing, although slowly, the fact is largely due to the support given by the State.

The following figures give an idea of the progress realized in the matter of the co-operative sale of animals for slaughter :

Year	Amount of Business Done	Year	Amount of Bnsiness Done
1897	153,629	1905	1,865,127
1898	222,260	1906	2,947,219
1899	472,342	1907	4,645,847
1900	385,512	1908	6,838,125
1901	414,315	1909	7,905,367
1902	711,102	1910	8,651,919
1903	1,254,540	1911	9,172,949
1904	1,454,484	1912	10,813,568

The sale of breeding stock which began in 1909 has progressed as follows :

Year	Amount of Business Done in Marks
1909	288,000
1910	291,000
1911	186,691
1912	523,412

In 1912 there were sold 313 oxen, 406 cows, 18 bulls, 90 calves and 1,451 pigs.

The distribution of the co-operative societies in the different parts of the country is as follows : in Suabia thirty-six co-operative societies, in Upper Bavaria twenty-six, in Lower Bavaria and Middle Franconia sixteen each.

The most important selling office in Bavaria is that of Munich ; that of Nuremberg comes next to it and then those of Augsburg and Amberg.

e) *Wurtemberg* — Here, as has been said, the position is analogous to that in Bavaria.

There are no registered co-operative societies but only free associations. There is no question anywhere of obligatory delivery. The foundation of the first associations dates from 1908. In 1912 they sold to the slaughter-house of Stuttgart 1,275 horned cattle, 4,426 calves, 4,682 pigs and 148 sheep.

As for keeping live stock for profit this has not hitherto had much importance in Wurtemberg.

DENMARK.

THE DANISH CO-OPERATIVE SOCIETIES FOR THE EXPORT OF EGGS.

OFFICIAL SOURCES :

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§ 1. HISTORICAL INTRODUCTION.

Up to 1870 poultry-keeping in Denmark was not considered to be a source of agricultural income and the production of eggs was limited to the quantity needed for consumption on the farms. But about this year a certain interest began to be shown in this branch of production. Between 1875 and 1878 two associations were founded to promote scientific poultry-keeping. The industry then began to develop, and it made rapid progress, shown by the growing export of eggs.

The progress, which became yet more marked about 1880, was indubitably connected with the reduction in the price of corn. It may therefore be regarded as one of the results of the passage from extensive culture to the intensive production of corn and the other crops giving foodstuffs, a passage accomplished by Danish agriculture as a consequence of the lowered price of corn.

The case was like that of the dairies and of the production of bacon ; production had to be reorganized, especially as regarded selling, in order that small farmers might conform to the new system. In the trade in eggs radical reforms had to be effected and as a consequence of these poultry-keeping became productive, could develop, and could be transformed from a subsidiary industry, which aimed only at supplying domestically a supplementary product, into a true and important source of revenue for the numerous class of small landowners.

In order to make the necessity for these reforms clear we will deal briefly with the trade in eggs.

In the past this trade was carried on as in other countries. The producers sold their eggs to the country dealers, who placed them on one side until they had accumulated a respectable stock which they resold to the wholesale merchants. The latter, as soon as they held a sufficient quantity, despatched them to foreign importers.

An organization of this type led to the fact that producers received low prices. The small producers, being debarred from an exact knowledge of the conditions of the market, found themselves completely at the mercy of the purchaser, and were moreover unable, in view of the local character of the purchases, to establish among the purchasers any fruitful competition. Moreover, since each middleman of the series wished, in order to lessen his costs, to have at his disposal the greatest possible quantity of eggs, they remained in storage too long before they reached the consumer, and so were depreciated, thus causing loss to the producers.

Another loss which was even more felt arose from the regular annual variations in the price of eggs, of which the following figures give an idea :

Price of Eggs in Copenhagen Market. Crowns (1) *per kilogramme* (2).

Year	January	February	March	April	May	June	July	August	September	October	November	December
1913.	1.50	1.30	1.10	0.84	0.90	0.95	1.04	1.10	1.20	1.35	1.75	1.85
1912.	1.55	1.60	1.20	0.88	0.94	0.94	0.96	1.06	1.16	1.35	1.60	1.75
1911.	1.52	1.16	0.96	0.86	0.90	0.89	0.98	0.96	1.14	1.25	1.75	2.00

In the first months of the year, since prices were going down, it was to the interest of the sellers to place their eggs as early as possible and the quality of these was therefore passable ; but in the second half of the year they

(1) 1 crown = about 1s 1 ¼*d* at par.
(2) 1 Kilogramme = 2.205 lbs.

speculated on the rising prices, and producers, dealers, wholesale merchants and foreign importers, all sought to hold up their eggs which reached the consumers in a more or less uneatable state. Prices naturally sank. In practice matters had reached such a point that in 1890 the Danish commercial attaché in London intimated that if a reform were not speedily introduced in the business of exporting eggs it would soon cease entirely to exist.

Therefore if it were desired that the export of eggs and poultry-keeping should be raised to a position of some importance, it was necessary first of all to organize the trade in eggs more effectively on the following bases: the eggs of the different producers to be collected rapidly; the dealers and the wholesale merchants to despatch them regularly and rapidly; and the eggs to be carefully examined, to be sorted and to be packed systematically. Further it was necessary to endeavour to free the producers from their dependence on the dealers, so that they could control the prices fixed by the latter.

It was clear however that traders in eggs would not by themselves accomplish the needed reforms, and they were in any case incapable of doing this as extensively and rapidly as was rendered desirable by the circumstances. They were further too much slaves of the very competition from which they suffered. Towards 1890 an opportunity arose for the better regulation of the trade, for the custom became general of paying for eggs by the pound. Previously they had been paid for by the number, and the producers had therefore kept the largest for themselves. Several of the largest exporters tried further to procure fresh eggs by forming local circles for their collection and by encouraging the dairies to be interested in eggs. But these attempts did not succeed, being defeated especially by the competition of the dealers in districts which to some extent suffered from them.

The only remedy to the condition of the affairs was that the producers should take the initiative as they had done in the matter of the production of butter and bacon. The first scheme of this kind dates from 1894 when it was decided to form a co-operative society which should extend its activity over the whole country, and finally exclude all middlemen, exporting its members' eggs to the foreign markets directly. After an effective preliminary propaganda this society, which assumed the name of *Dansk Andel Aegeksport*, could begin work in the first months of 1895. Subsequently adhesions to it took place with such rapidity that in the following year it had 14,000 members and had become so important a factor in the egg trade that the year 1895 could rightly be said to have begun for Denmark a new era in this branch of commerce. In the following years the membership of the society continued steadily to increase, and other societies began also to be interested in the export of eggs. They adopted the same principles as the *Dansk Andel Aegeksport*, but none of them developed to an equal degree. Towards the end of the decade 1890 to 1900 a series of small co-operative societies for the export of eggs were constituted in various provinces of Denmark, but they were shortlived: the greater number of them found it

most profitable to merge themselves in the *Dansk Andel Aegeksport*. A single large society, which had united the export of eggs with that of butter and had had an important growth, also gave up its business of exporting eggs, after several failures, to the *Dansk Andel Aegeksport*. All this did not on the whole do much injury to the co-operative movement, for co-operative societies for the export of eggs have never included more than a small number of the producers. If in spite of this they have been able, in competing with large isolated traders, to exercise from the beginning an almost revolutionary influence on the trade in eggs, the reason for the fact should be sought in the strength given to the movement by their concentration in one or two societies, able to dominate the weaker private firms interested in the same trade.

At present, outside the *Dansk Andels Aegeksport*, there are only a few co-operative slaughterhouses, seven in all, which export eggs on co-operative principles. They have associated to establish some common rules and a common price list for their products. Several of them have attained to sales which are not negligible, especially if their own purely local character be take into account. However the combined trade of the seven societies hardly amounts to two thirds of that of the *Dansk Andels Aegeksport*. The following table will give a general idea of the business done by the co-operative societies for the sale of eggs in 1914.

Co-operative Slanghterhouses.	Eggs supplied in 1914 Kilogrammes.	Total value Crowns
Frederiksund	866,126	1,082,858
Slagelse	609,427	804,550
Roskilde	527,660	656,706
Nakskov	412,785	534,279
Kalundborg	311,742	400,315
Haslev	80,743	106,484
Logstor	22,321	27,975
The 7 slaughtershouses	2,830,804	3,613,167
Dansk Andels Aegeksport	4,685,275	5,692,096
Total	7,516,079	9,305,263

Thus the co-operative societies have sold altogether about seven and a half million kilogrammes of eggs, that is approximately a quarter of the total Danish export which was in 1914 one of about 28.6 million kilogrammes.

The following table gives data, according to information gathered from the official census of domestic animals, as to the composition of the local circles for the collection of eggs. It should be noted however that the figures of the census seem to be too low.

Farms registered at the Local Circles for the Collection of Eggs in 1909 *distributed according to Size (Agricultural Districts).*

Area of farms hectares (1)	Number		Percentage		
	of Farms	of Hens	of total no. of farms	of total number of hens	
				1909	1903
0– 0.55	6,312	221,411	15.5	22.0	22.6
0.55– 5	13,052	663,274	22.7	29.6	32.6
5 – 15	10,374	627,898	21.2	28.2	30.9
15 – 30	8,025	639,882	22.5	29.5	33.6
30 – 60	5,666	545,746	23.8	31.0	33.8
60 – 240 , ...	1,306	140,627	19.1	25.5	30.7
more than 240.	104	19,884	18.1	20.9	30.9
Total . . .	44,839	2,858,722	20.9	28.4	31.4

(1) 1 hectare = 2 acres 1 food 35,383 poles.

According to the census of 1914 the total number of farms and hens participating in the local circles was equal to that of 1909 or even slightly less.

The associations for the export of eggs comprise therefore 20.9 per cent. of the farms in rural districts. In the towns the proportion is less. The percentage is much the same in the different groups of farms except that it is less in those having an area of less than half a hectare. This is very natural since these holdings are not, properly speaking, farms, and often have a small amount of stock, sufficing at most for consumption on the holdings. Further their favourable topographical situation enables the local sale of their products at renumerative prices.

Among the farms which, according to the facts collected, belonged in 1909 to the circles for collecting eggs (*Aegsamlingskreds*), 20.9 per cent. comprised 28.4 per cent. of the hens included in the census. It is clear therefore that the farms belonging to the circles have a relatively larger number

of hens than the others. This fact is made yet more evident by the following table, which shows the average number of hens on farms belonging and not belonging to the circles in 1909, the farms being grouped according to size. As the census was taken in summer about half the figures refer to chickens.

Area of Farm (hectares)	Average Number of Hens on a Farm	
	Belonging to a Circle	Not belonging to a Circle
0– 0.55	35	22
0.55– 5	51	35
5 – 15	61	41
15 – 30	80	55
30 – 60	96	67
60 –240	108	85
More than 240	191	159
Total . . .	64	41

This table seems to show that the larger a farm the greater is its profit in belonging to a circle — even its necessity to belong to one. But this is indubitably due to the constant propaganda of co-operative societies for the export of eggs to induce their members to keep poultry.

The results of the census show that in this sphere the co-operative movement was slightly retrogressive from 1903 to 1914 or at least that it was not progressive.

This accords with the fact that the marked growth which occurred in the preceding series of years was finally arrested, a fact confirmed if the business compassed by the co-operative associations for the export of eggs be compared with the total exporting business of co-operative societies. The figures representing the latter have been maintained at a constant level for many years, while it is indubitable that the Danish consumption of eggs has steadly increased in notable proportions.

This does not mean that the *Dansk Andels Aegseksport* is unable to carry out its programme. On the contrary the results which have been mentioned should rather be considered due to the fact that the co-operative societies, although they are so little widespread, have succeeded by the force of their competition in reforming the trade in eggs, in such wise that the benefit of belonging to one of them is now insignificant compared with what it was during the first years after their foundation.

§ 2. The interior organization of the co-operative societies for the export of eggs and the principles on which they act.

As has been said the force of the co-operative movement in this sphere has consisted in the fact that the different societies are concentrated in a single large society, the *Dansk Andels Aegeksport*. This association, the only one which extends its action over the whole country, is not only the largest of the societies which exist to export eggs, accomplishing, as appears from the table showing the activity of these co-operative societies, about 60 per cent. of their total business, but it is also the most scientifically organized and the best managed of them, and that which most rigorously applies co-operative principles. We will proceed to study and to describe the working methods and the organization chiefly of this society, especially as it was the first to be formed and the others have patterned themselves on it.

The principal object of this co-operative society is, according to the law, to render the best foreign markets accessible to foreign eggs. It attains its object by guaranteeing to purchasers that the eggs bearing its registered marks and classified as fresh eggs are such in fact. Further the society aims at defending in every respect the interests of producers, and is able to concern itself with the preservation of the eggs and the selling and keeping of the poultry of its members, as well as with the establishment of especial stations for the promotion of scientific and profitable poultry-keeping.

The preservation of eggs was not at first among the objects of the society, but it soon found it necessary to give attention to this process because the private egg-exporters who preserved eggs had otherwise an advantage over it, in the season in which eggs are preserved. This was detrimental to the prestige of the society who, further, could not compel its members exactly to fulfil their duty in the matter of deliveries. Therefore as soon as the society had acquired the necessary capital, and had also, as the result of recurrent experiments, acquired sufficient experience, it began to preserve eggs on a large scale, and obtained thus a source of much eventual profit. We will speak later of its poultry keeping activity, which has been of capital importance to it. Such enterprise was not undertaken until after several years.

This society is composed of circles (*Kredse*) constituted by at least ten members and called egg-circles (*Aegkredse*) or egg-collection-circles (*Aegsamlingskredse*). Only the circles can become members of the society. Their task is to collect the eggs and send them to the society's centres for despatch.

In order to be able to guarantee the absolute freshness of the eggs the society has organized a minute inspection both of circles and individuals, with the object of thus ensuring the scrupulous fulfilment of the rules for collection and delivery.

Enrolment as member of a circle is binding for a year. A circle must, when enrolling, send a copy of its by-laws and a list of its members, with

their order numbers, names and addresses. Intimation of each new enrolment should at once be sent to the society. The management of each circle must see that its by-laws do not violate the society's provisions.

The members engage to deliver to the circle all the eggs their hens produce — except eggs for hatching, those found accidentally and those needed for their own consumption — in the manner and within the interval of time determined by the circle. The obligation thus to deliver eggs lasts for a year and is renewed annually. Eggs more than seven days old must not be delivered. Whoever disobeys this rule or delivers rotten eggs is liable to a fine of five crowns. In case of a second offence within the same solar year the fine is raised to ten crowns. Each egg must be clean when delivered and, to facilitate the necessary inspection, must be legibly inscribed with the circle's stamp and the member's order number In order moreover to ensure the uniform stamping of eggs, the circles must procure from dealers designated by the society the stamps and the ink which they remit to their members.

The stamps allow the origin of eggs found to be bad or in a bad condition to be established at once, in the society's despatching offices in which they are examined, the sender of these eggs to be apprised immediately of their state, and the merited fine to be eventually imposed on him.

This system of rigorous fining has certainly not facilitated the society's activities for it has aroused the hostility of many members. But it is an extraordinarily effective method of obliging the members scrupulously to discharge their duties as such, perhaps the only effective method possible to an organization in which each member feels his responsibility to the others less than in such other local co-operative societies as the co-operative dairies.

In the by-laws of the circles it is further prescribed that the eggs must be collected regularly once a day, and twice a day in the warm season, that only artificial eggs may be used to induce laying, and that the hens may not have access to the laying place during the night.

Further, members may deliver to the circles only eggs produced by their own hens. Producers and collecting circles must alike protect the eggs against the action of the sun, rain and cold.

Various rules have further been established which apply both to members and to circles and aim at causing the eggs to reach the consumer in the shortest possible time and the best possible condition. The circles are obliged to deliver to the society all the eggs they receive from their members within the week in which they receive them. In exceptional cases however the management can make especial and temporary rules in this matter. The society reserves the right to refuse eggs which are dirty or indistinctly stamped, or to accept them at lower prices.

In case a circle do not deliver all the eggs it has received from its members, or do not remit them in time, it loses its right to its share of the profits of the society and the reserve fund for the current year, and it may be expelled by the management of the society.

The authorities of the society comprise the management, the repre-

sentatives and the general meeting. The management, formed by a manager and four members, is chosen by the general meeting, the former for four and the others for two years.

The manager is also an administrator and with another member of the management forms the administration committee, which fixes prices and constitutes the firm.

The signature of two of the members is necessary to bind the society.

The management is concerned with the administrative organization ; it nominates the technical manager and the other employees whose salaries are fixed by the representatives.

The manager directs on his own responsibility all the society's establishments and represents the society's judgement. He thus acts as technical manager. This arrangement was intended to give preponderance to the technical element in the society's management, a matter of much importance since an enterprise of an almost purely commercial character is in question. The manager receives 5,500 crowns a year, plus one half per cent. of the turnover of the preceding financial year. The other members of the management have no fixed salaries but receive payment by the day and compensation if they have to travel.

The representatives number one for each province, elected for a year by members of the circles in his province. The duty of representatives is to see that the by-laws and the decisions of the general meeting are observed. All important business arising out of the ordinary administration should be submitted to the preliminary examination of the representatives, who will decide in the matter if it be not urgent.

The general meeting comprises the management, the representatives and a delegate of each circle. The management and the representatives have no votes unless they are also delegates. The ordinary general meeting takes place once a year ; an extraordinary meeting is convoked following on a decision of the management or the representatives, or in response to a request from one tenth of the circles.

The general meeting chooses two revising accountants who inspect the books once a month.

The capital for the financial year is united, as regards its greater part, a reserve fund being constituted. Half the net profits of the preceding year are distributed to the circles in October, in proportion to the value of the eggs they have provided ; the rest is paid into the reserve fund with which the circles are then credited, a special account proportionate to the value of the eggs delivered being opened with each of them. The provision that profits be paid only in October, while the financial year ends in December, is intended to ensure to the society abundant resources in the season favourable to the preservation of eggs. The reserve fund is a guarantee of the engagements of the circles and the members to the society. Neither circles nor members have however unlimited liability arising out of the society's engagements, but have a liability limited to their share of the reserve fund, which cannot be distributed after the dissolution of the society unless the management decide that its whole sum can be usefully employed. In case

of a distribution of the reserve fund among the circles a beginning is always made with the most remote years. Interest is paid at the rate of four per cent. to the circles on their shares in the reserve fund, at the same time as profits are paid to them.

The share of a circle or a member in the reserve fund cannot be the object of an action at law on the part of the creditors of the circle or the member.

Having seen what is the organization of the society we will proceed to examine its working.

In the circle and in the despatching offices alike much importance is given to the promptest possible despatch of eggs. Most circles are served by employees provided with vehicles with which they fetch the eggs from the producers once a week and even oftener in summer. In this way their punctual delivery is best guaranteed. When this method of collection is too costly the producers are obliged themselves to bring their eggs to the place of delivery. It often happens that small producers are then driven to keep them too long before delivering them. Generally the cost of collecting the eggs is two or three öre (1) a kilogramme.

The eggs are paid for in cash at the time of delivery and according to the current price fixed by the central office. The price is the same for the whole country. This uniformity is possible because the local markets are unimportant. Payment is always made by weight, and thus not only is the production of larger eggs encouraged, but producers are influenced to keep the smaller for their own consumption. The quantities delivered and their value are entered on the personal books of individual members. These accounts are closed at the end of the year to allow of the distribution of profits.

The employees charged to collect the eggs pack them in especial boxes provided with cardboard frames which give a place to each egg. Thus packed the eggs are sent to the society's despatching offices which pay for their transport by railway. The railways treat them as very perishable merchandize, a privilege which the society succeeded in obtaining soon after its foundation and which is most important. The circles for collecting eggs take no part in examining them or in finally packing them for export, operations which entail much work, and for the purpose of which a numerous and expert staff, almost entirely of women, is being formed in the society's despatching offices. The eggs are sorted according to size not only to satisfy the needs of the British market but also to render their transport safer, for it is well known that eggs of different sizes packed together break easily. Before being definitely packed the eggs are tested by being held up to the light. Those which are stained, black or dirty are placed on one side and assigned to local consumption. After this selection they are packed in long flat boxes which contain seventy-two *snese* (2) of eggs and are made with a double dividing partition so that they can be sawn and divided

(1) One öre is about one eighth of a penny at par.

(2) 1 *snes* corresponds to twenty eggs.

into two. The eggs are arranged in layers, separated from each other by sawdust or wood shavings. All the eggs in each layer bear the society's mark, a measure necessary because the inspection stamps have been counterfeited by dishonest competitors and imitated by other societies. Even the mark has been the subject of a forgery; and the society has been obliged to undertake a whole series of actions at law both in Denmark and in Great Britain in order to win respect for it.

In spring and summer a large number of eggs are preserved. The society derives large profits from this undertaking, as from others of the same kind. Preserving has moreover an extraordinary importance to the financial side of egg production, not only directly but also indirectly, in that it relieves the market and raises prices in seasons of the year in which there would otherwise be a veritable plethora of eggs.

The despatching offices take no part in the marketing of the eggs. All the commercial side of the enterprise is entrusted to the central office. All that is incumbent on the despatching offices is the despatch of the goods according to orders received from the central office. The eggs are sent directly from the packing-house to the purchaser, the central office being notified of their despatch, and being responsible for all subsequent business with customers.

Similarly despatching offices are not expected to keep accounts with circles, but merely to inform the central office of the quantity of eggs they have received.

All money is received and all payments made as the by-laws rule and by the medium of a bank chosen by the representatives. Payments for the eggs received should be made to the circles with as little delay as possible.

Besides the packing-houses there are in many places establishments for keeping poultry, but the sale and fattening of the birds have not yet become important, for poultry-keeping in Denmark aims almost exclusively at producing eggs. The business done by these establishments in selling feathers has yet brought in a higher sum than 28,000 crowns a year. There are at present ten packing-houses for eggs of which six are provided with apparatus for egg preserving.

To give an idea of the society's economic activity we reproduce its balance-sheet for 1914.

Balance-Sheet of the Co-operative Society "Dansk Andels Aegeksport" for 1914.

Receipts.

	Kilog.		Crowns öre
Eggs.	—		— —
Existing stocks in packing houses 1 January 1914 . .	9,175.8	=	14,962.66
Eggs received in the year . . .	4,685,274.5	=	5,002,413.05
Gross profit on eggs			674,721.04
	4,694,405.3	=	5,692,086.35

Average price per kilogramme including profits. Crown 1.12.7

Poultry for Feather Production	Crowns öre — —
Stocks on 1 Jan. 1914	1,921.06
Bought in 1914 and costs of keep	25,682.47
Profit	416.84
	28,065.37

Expenditure.

	Kilog.		Crowns öre
Eggs.	—		— —
Sold abroad . .	4,018,391.5	=	4,876,375.95
Sold at home as good eggs . .	396,374.1		
Sold at home as broken . . .	258,551.8	=	787,808.30
Loss (0.20 per cent.)	9,510.1		
Remaining in packing houses 1 Deccem. 1914.	11,622.8	=	25,912.10
	4,694,450.3	=	5,692,096.10

Average price per kilogramme. Crown 1.20.9

Poultry for Feather Production	Crowns öre — —
Poultry sold in 1914.	26,834.38
Remaining 31 Dec. 1914 . . .	1,230.99
	28,065.37

Summary of the Society's Debit and Credit Account on 31 *December* 1914.

Credit.

	Crowns öre — —
Received at central office and despatching offices	8,507.20
Credit for eggs provided . . .	137,992.58
In the bank.	480,774.00
Value of stocks of fresh and preserved eggs, packing material, furniture, birds, cardboard frames, and various material.	192,527.37
Real estate in Nykøbing, Nexø, Vejle and Odense	89,717.74
	909,518.89

Debit.

		Crowns öre — —
Debts to circles		26,500.98
Various debts		104,794.36
Reserve fund and profits 1 Jan. 1914	663,007.69	
Profits paid to circles	118,491.14	
Reserve funds paid to circles .	47,356.40	
	165,847.54	
		497,160.15
Profits of 1914		218.063.40
		909,518.89

Origin and Distribution of Profits.

	Crowns öre		Crowns öre
Costs of packing	309,318.17	Gross profits on exporting eggs	674,721.04
Expenses of central office	62,398.14	Fines	1,155.00
" " newspaper *Andels Bladt og vor Aegeksport*	3,031.41	Profits on boxes and packing material	44.23
Prizes at poultry keeping competition	1,442.00	Profits on birds	461.84
Contribution to life insurance of employees	1,930.64		
Interest on reserve fund paid to circles	15,340.71		
Amortization	1,857.64		
Net profits for 1914	281,063.40		
	676,382.11		676,382.11

The society has received altogether from the circles 4,685,274.5 kilogrammes of eggs which have been credited to the members at the rate of 1.127 crowns net a kilogramme, six öre of such price being paid as a supplementary profit to the reserve fund. The gross price realized by the sale of eggs averaged 1.209 crowns a kilogramme. The general costs amounted therefore in the year to about 8.2 öre a kilogramme, that is about seven per cent. of the gross value of the product. The society worked with a total capital of 909,519 crowns, of which sum 497,160 crowns constituted the reserve fund and 281,063 crowns the profits of the current year. Their shares of the reserve fund are paid to the circles in order of seniority. From the balance-sheet which we reproduce it follows that the payment of such share had occurred in 1908 and the reserve fund therefore represents half the profits of the five last years. Like many other co-operative societies the *Dansk Andels Aegeksport* borrows from its members, paying interest at the rate of five per cent. The item " various debts " on the balance-sheet, which accounts for 104,794 crowns, was largely constituted by these loans. Of the capital 89,718 crowns was invested in real estate and 339,027 in various titles and in credit for eggs provided, while more than half was deposited in the bank on current account. This relatively large capital is not however employed on the enterprise all the year but is needed from the moment at which egg preserving is begun until the reserves are exhausted. We give the balance-sheet of an egg-collecting circle belonging to the *Dansk Andel Aegeksport*.

Balance-Sheet for 1913 *of Circle* 345.

Receipts.	Crowns öre	*Expenditure.*	Crowns öre
In hand 1 Jan. 1913	1,790.79	Paid for eggs	40,021.13
Credit with central office . . .	42,527.58	Transport of eggs (3 1/2 öre a kilog.)	1,452.81
Profits of 1912 (1.4 % on 36,378.08 crowns)	509.29	Paper, cardboard, boxes . . .	9.77
Reserve fund for 1907	307.11	Wages of chief workman and travelling expenses	60.00
Interest on circle's reserve fund on 1 Jan. 1912 (4 per cent. on 2,446.92 crowns)	97.88	Costs of postage, telephone, etc.	15.40
		Profits of 1912 paid 8 Feb. 1913 at rate of 5 öre per kilog. .	1,816.00
		Balance in hand 31 Dec. 1913	1,740.41
	45,232.65		45,232.65

Condition 1 *January* 1914.

	Crowns öre		Crowns öre
Boxes and packing material. .	350.00	Profits to be distributed at rate of 5 öre per kilog.	2,070.05
In hand.	1,740.41	Profits to be laid on one side.	20.36
	2,090.41		2,090.41

Among the expenses of the central office the item "costs of competition to encourage poultry-keeping" deserves especial attention, for it represents the society's action in encouraging poultry-keeping, which although it was of modest proportions as regards its direct means yet was of fundamental importance in promoting and assisting this industry in a truly economic sense.

The society began to exercise such action in 1902. While other associations in the same sphere followed a course which might be called more or less that of poultry-fanciers, giving importance rather to the exterior points of the birds than to the interests of the industry, the *Dansk Andels Aegeksport* endeavoured to encourage scientific and remunerative poultry-keeping. To attain this end it organized annual competitions aiming at distinguishing and rewarding the poultry-keeping which not only was remunerative but also conformed to a fixed system founded on a knowledge of the yield of the birds. To help those wishing to take part in the competition the *Dansk Andels Aegeksport* has published a book for keeping accounts and one for recording the pedigrees of poultry. The poultry-farm which received the first prize was moreover recognized by the society as a centre for poultry-keeping for a year. By means of the competition a scientific basis was thus given to the formation of new breeds, and to the diffusion

of eggs for hatching and fowls for breeding, emanating from good and recognized poultry yards.

The society's action has won general approval, signified principally by the State's financial aid. Agricultural associations and their members have largely had recourse to poultry-keeping centres for the purchase of eggs for hatching and fowls for breeding. This branch of the society's activity now forms part of the collective enterprise in feather production undertaken by various agricultural societies and by the *Dansk Andels Aegeksport* under the name of the Association for keeping Feathered Fowls (*Faellesudvalget for Fjerkraeavlen*). The association receives from the State an annual grant of 12,000 crowns. Especial note should be taken of the expenses incurred by the society in publishing its two organs, *Vor Aegeksport* (Our Export of Eggs) and *Andelsbladt* (Co-operative Journal), of which the former is a summary of the latter.

§ 3. The importance of the "Dansk Andels Aegeksport" to the egg trade. The place of Danish eggs in the British market.

It is at once clear that the organization of the Danish Co-operative Society for the Export of Eggs followed on a happy beginning. This society could guarantee absolutely a product of the first quality, and such guarantee commanded a higher price than that generally realized by the other exporters of Danish eggs. As early as 1897 the consul of Denmark in Newcastle said in his report, "For this second half of the year two prices are cited for Danish eggs, that for the eggs guaranteed to be fresh and that for current merchandise". The London market, which at first was entirely closed, opened to imports of Danish eggs, and these soon won for themselves the first place, obtaining the same prices as eggs coming from the best sources. During the last months of 1899 the best Danish eggs were sold at a higher price than the best otherwise on the market, because of the guarantee afforded by the system of inspection to which they were subject.

The good results obtained by the Danish Society for the Export of Eggs and the danger that it or other societies of the same kind might conquer the market were instructive to the exporters, who became convinced of the wisdom of giving up speculating in and engrossing eggs. Consequently a general improvement was soon manifest in the quality of the eggs sold during the last months of the year. As early as 1896 it was stated in the report for that year of the Danish consul at Newcastle that "the conditions of the egg trade have been somewhat better than in preceding years, for up till November the eggs arrived in excellent state, so that prices have been higher than in the past and new markets for Danish merchandise have opened".

But it is the competition of the society within the country which has contributed more than anything else to bringing in a general reform in the trade in eggs and an improvement in their quality. The *Dansk Andels Aeg-*

eksport could, since it obtained better prices, offer more profitable terms than other exporters to the producers; and although the other exporters at first received a compensatory profit during the time in which eggs were being preserved, this happened only until this society also undertook this branch of the trade.

Further, since the society spread rapidly over Denmark and since the prices it offered were published in the daily papers, these prices gradually became general and valid throughout the country. Together with the society's price list a common price was established for the co-operative slaughterhouses exporting eggs and an official price list of the Association of the Wholesale Merchants of Copenhagen. The slaughterhouses and this association generally however follow the list of the *Dansk Andels Aegeksport* so faithfully that erroneous prices appearing in the society's list have been simply reproduced in the two others.

The formation of an official price list has been very important to producers of eggs. They had worked for one in vain even before the co-operative society was formed. Such a list had in the egg trade its maximum importance, for the price list for eggs, unlike the lists for other goods, imposed the condition of absolute freshness and of excellence of quality. It was the best means to the realization of a general reform of the egg trade ; for the middlemen, wishing to maintain their position, became more exacting towards the engrossers and the producers in order to obtain from them eggs which fulfilled the condition imposed by the list, and this they succeeded in doing.

The Co-operative Society for the Export of Eggs has indubitably acquired extraordinary importance. It acts as a spur : it creates the emulation which induces the maintainance and the continual improvement of the good quality of Danish eggs. It is plain that as the *Dansk Andels Aegeksport* succeeds in fulfilling its task, that of raising the price of eggs for all producers, the advantage of belonging to it diminishes proportionately. This fact naturally makes its growth more difficult. The publication of the price-list appears therefore not to be very profitable, and the advisability of interrupting it has been recurrently discussed. An attempt to do so was made in 1909, and although it was short-lived it served to show the importance of this publication. Hardly had it stopped when the prices offered by the society's competitors sank, by 14 öre and more a kilogramme, below those paid by the co-operative society. These competitors were obliged to decide to publish their lists a day later in order that they might first consult the list of the *Dansk Andels Aegeksport.*

It is the keen competition which it encounters which has caused this society to adopt the system of making a supplementary distribution of profits after the end of the year, instead of paying the highest possible prices for the eggs on delivery. By its example and its vigilant competition, exercised on parallel lines to those followed by other co-operative societies in the same sphere, the *Dansk Andels Aegeksport* has caused the egg trade to follow a more certain course and at the same time to influence beneficiently poultry-keeping in general.

For a sale of eggs, for which an increase could be foreseen, brought in its train a large increase of poultry-keeping; and this industry, being based essentially on the sale of produce, is much affected by all increased remuneration. A large marketing of produce is within certain limits possible by means of an only slightly larger initial capital and without much extra labour.

Thus from 1893 to 1903 the dimensions of the poultry-keeping industry in Denmark were doubled, as is seen by the following figures.

Growth of Poultry-Keeping in Denmark.

Year	Value of Fowls (Millions of Crowns)	No. of Farms engaged on the Industry
1888	4.59	—
1893	5.86	—
1898	8.77	—
1903	11.56	271,826
1909	11.82	287,862
1914	15.14	304,009

After 1903 poultry-keeping was arrested for several years, partly as a result of a rise in the price of corn of far larger proportions than the contemporaneous rise in the price of eggs. At least half the farms on which poultry are kept have to buy corn to feed the fowls because they are not arable. But it is certain as regards the arable farms that another cause of the check to poultry-keeping was that this industry is in Denmark often secondary and therefore cannot extend beyond certain limits. The census of 1914 shows however a large later increase, evidently connected with the marked rise in the price of eggs.

The extension of poultry-keeping has naturally caused a yet further increase in the export of eggs. While from 1893 to 1903 the number of fowls in poultry-yards was doubled, the quantity of eggs exported was tripled.

The following table indicates the annual increase in the export of eggs for the forty years from 1874 to 1914.

Annual Increase in the Export of Eggs.

	Millions of Snes	Millions of Crowns
1871-75	1.02	0.95
1876-80	1.10	1.23
1881-85	2.70	2.55
1886-90	5.10	4.68
1891-95	6.58	6.88
1896-1900	12.02	13.10
1901-05	18.24	21.89
1906-10	18.29	24.64
1911	20.10	27.74
1912	17.88	25.45
1913	21.49	31.24
1914	21.78	34.90

Eggs have therefore become for Denmark not only a very important article of foreign trade, but also one of capital importance for the British market towards which almost the total Danish production for export is directed.

In 1913 the exported eggs were distributed among the different countries as follows :

	Millions of Snes
Great Britain	21.67
Germany	0.90
Sweden	0.08
Other countries	0.07
	22.72

Thus ninety-five per cent. of the exported eggs go to Great Britain. The position which Danish exporters have won in the British market is the best proof of the importance of the business of the egg trade.

Since 1903, after the enormous growth of the latter years of last century, the imports of Danish eggs into Great Britain have hardly varied. They have been equivalent to about a fifth of the total imports of eggs into the country. Germany, France and Belgium sent in the past larger quanti ties than Denmark, but this country from 1903 became the largest importer after Russia, whose exports to Great Britain continue markedly to increase.

The position is made clear by the following table.

Import of Eggs into Great Britain.

Exporting Countries	Years						
	1899	1900	1905	1910	1911	1912	1913
	(Millions of Snes)						
Denmark. absolute quantity	13.9	14.6	23.1	21.9	24.0	21.7	25.6
Denmark. percentage	10.5	14.5	20.5	19.9	21.0	19.0	19.8
Russia	25.9	24.1	45.7	55.3	60.3	58.1	68.7
France	13.7	13.7	9.4	5.4	3.9	4.0	4.2
Germany	20.7	21.0	13.1	3.0	3.5	3.1	3.1
Belgium	14.7	14.3	12.9	24.4	22.7	27.6	27.9
Other countries	8.4	13.5	8.7				
Total	97.3	101.2	112.9	110.0	114.4	114.5	129.5

The following table shows the average prices of Danish, Russian and French eggs from 1899 to 1913.

Price in öre for 1 "snes".

Year	French Eggs	Russian Eggs	Danish Eggs
1899	113.7	82.2	107.0
1900	114.3	82.7	113.6
1901	116.0	81.0	116.0
1902	128.0	84.9	116.5
1903	125.6	82.3	128.6
1904	125.3	87.1	121.8
1905	126.2	95.6	127.3
1906	126.0	98.6	133.6
1907	131.7	100.0	140.0
1908	131.5	106.8	139.6
1909	136.5	107.8	148.5
1910	138.9	106.9	142.5
1911	141.0	113.3	152.5
1912	140.0	122.4	161.3
1913	140.5	124.3	176.5

ITALY.

SOME FACTS AS TO THE DEVELOPMENT AND ORGANIZATION OF CATHOLIC RURAL BANKS IN THE DISTRIT OF LODI.

SOURCES:

VIGORELLI (Dr. Remo): La cooperazione rurale di credito nel Lodigiano. 1908-1915 (*Rural Co-operative Credit in the District of Lodi*). Lodi, Premiata Tipografia G. Biancardi, 1916.

FEDERAZIONE DIOCESANA DELLE CASSE RURALI DI LODI. Relazione morale e finanziaria dell'esercizio 1915-1916 (*Diocesan Federation of the Rural Banks of Lodi. Report on the Moral and Financial Activity of* 1915-1916). Lodi, 1916.

The secretary of the Federation of the Rural Banks of the Diocese of Lodi recently published an interesting report on the development of co-operative rural credit in this district. We think it well briefly to resume this report for it helps to a better knowledge of the essence and the activity of these " precious organisms " of credit.

The societies which we will examine are in the form of small, rural, Catholic banks (1) founded on the two essential principles of unlimited and collective liability and of the Catholicism of their members. They are based also on other principles, which are secondary although connected with those which have been cited, namely their local character, the non-existence of preference shares, the indivisibility of profits and of collective funds, and gratuitous administration. Their aim is to " militate against usury while at the same time providing the rural labouring class with credit, easily obtained at a minimum rate of interest; to revive and to restore fraternal relations between different classes by causing credit to discharge its true social function; and to encourage thrift by rendering it productive locally, and, above all, by making the land its object ". We will review the constitution and the working of these banks.

§ 1. CONSTITUTION AND WORKING OF THE BANKS.

The banks examined number thirteen and are all of recent date having — with the exception of one founded in 1903 — first appeared about 1908.

(1) See RAVIGATI (Arturo) *La cassa rurale*. Florence, 1912.

They are due to Catholic initiative. Their membership has increased rapidly as is seen from the following figures.

TABLE I. — *Number of the Banks and their Members and Average Membership of a Bank.*

Year	Number of Banks	Number of Members	Average Membership
1908.	8	667	83
1909.	12	894	75
1910.	13	1038	80
1911.	13	1427	109
1912.	13	1583	121
1913.	12	1518	126
1914.	13	1527	117
1915.	13	1580	122

The number of members was thus doubled in the four years from 1908 to 1911. The diminution noticeable in 1913 was due to the fact that one bank ceased to operate. After the early variations, explained by the modest beginnings of these banks, the average number of members in a bank rose definitely and steadily until it reached 126. As regards membership the bank of San Colombano al Lambro ranks first. It was founded in 1907 and had 433 members on 31 December 1915. Next to it comes the bank of San Michele Arcangelo which has 235 members. The number of members in different places varies from 16.6 to 150 out of every thousand inhabitants.

The majority of them are small holders cultivating their own lands. Next to these come the small tenant farmers, the *métayers*, and finally the peasants and the agricultural labourers of other classes.

Financial property. — This is normally constituted of the capital and the reserve fund. But in the rural banks the capital contributed by the members has a minimum importance. Each member pays into it, when he enters the society, one or two liras (1) at most, almost as a membership fee rather than a share of capital. The small sum thus arising naturally does not and could not be used for the economic purposes served by the reserves accumulated from the profits of the different financial years. By the nature of its constitution a rural bank does not distribute dividends to its members. The profits are indivisible and are for the most part paid into the reserve fund, saving for several special allocations. The capital and the reserve fund remain indivisible if the society be dissolved. We show the absolute value, and the average value for a single bank, of the capital and reserve fund, since the end of 1908.

(1) 1s = 1.2611 liras at par.

TABLE II. — *Financial Property of the Rural Banks on 31 December from 1908 to 1915.*

Year	Number of Banks	Capital & Reserve Fund (liras)	Average Capital & Reserve Fund of one Bank (liras)
1908.	8	2,728	341
1909.	12	3,942	328
1910.	13	4,575	352
1911.	13	5,490	422
1912.	13	7,428	571
1913.	12	7,757	646
1914.	13	10,512	808
1915.	13	13,008	1,000

Thus although the amount of the capital and reserve fund has increased, especially in recent years, it has continued to be a modest sum of money. We need only state that in 1915 it was equivalent to 1.6 per cent. of the sum deposited as savings in these banks. The fact is consistent with the character of the rural banks, the true guarantee of which is constituted by the collective and unlimited liability of their members.

Deposits. — Thus a rural bank generally operates with funds obtained by opening credit accounts with other banks and with the deposits entrusted to it by its members or others. When a society of this type is initiated recourse is naturally had at first rather to the former than the latter of these resources. This course is followed even later where savings do not amount to much. But even in Italy the rural banks have proved themselves to be effective agents for the collection of savings (1): the collective and unlimited liability of members affords the best security to depositors, especially in countries of small holdings.

The rural banks of the district of Lodi therefore largely meet the demand for credit by means of their deposits, which have increased as shown by the following table:

TABLE III. — *Deposits in the Rural Banks from 1908 to 1915.*

Year	Number of Banks	Deposits (liras)	Average Deposits per Bank (liras)
1908.	8	154,365	19,296
1909.	12	276,486	23,040
1910.	13	411,878	31,683
1911.	13	454,484	34,960
1912.	13	562,717	43,286
1913.	12	615,661	51,305
1914.	13	707,787	54,445
1915.	13	804,120	61,855

(1) The rural banks in Italy had collected, in deposits of various kinds, 72,605,648 liras on 30 June 1910; 101,632,297 liras on 30 June 1913; 103,663,360 liras on 30 June 1914. See *Esposizione finanziaria fatta alla Camera dei Deputati nella seduta dell'8 dicembre 1915 dal Ministro del Tesoro (Paolo Carcano)*. Rome, Tipografia della Camera dei Deputati, 1915.

The increase of deposits has therefore been continuous and rapid: in the eight years examined their absolute value has been more than multiplied by five and their average value for one bank has more than tripled. The extent to which these banks enjoy the confidence of the rural population is thus clear.

The deposits are in their larger part free, as regards a small portion hypothecated. The rates of interest paid on deposits are very much those obtaining in other local banks, namely three per cent. on those which are free and three and a half per cent. on those which are hypothecated. A few of these rural banks pay four per cent. on children's deposits, wishing thus to encourage small savings in families.

The total amount of deposits, which on 31 Decembr 1915 was 804,120 liras, was distributed over 1729 accounts, giving an average of 465 liras for a single account. It is thus the people with small purses who chiefly swell the sums at the disposal of the rural banks.

Current liability accounts. — We have seen that the rural banks do not have recourse to these unless the sums provided by depositors are insufficient to satisfy the demand for credit. Such accounts have in the rural banks of the district of Lodi little importance, amounting on 31 December 1914 to 1,444 liras and on 31 December 1915 to 20,062 liras for three banks.

Loans to members. — The sums deposited in a rural bank are lent by it to its members who are in need of credit, in the form of an ordinary loan made in return for a bill guaranteed by a surety. In this connection the rural banks follow some very individual methods: in the request for a loan, which is submitted to the council, the purpose for which the money is desired is stated; and this in itself affords the bank an additional security, and allows it to give credit its true social function. If, for instance, there be question of credit for the purchase of live stock, the council verifies the purchase, watches over the animals when they are in the borrower's stall, insists that they be insured, etc. The social advantages of such a system are evident.

As regards the duration of loans they are usually accorded for a term of from three to six months. Generally they are extinguished slowly: they are renewed each time they fall due on payment of a tenth or more of the original debt.

The following are the data for the two last years:

TABLE IV. — *Loans accorded on Bills in* 1914 *and* 1915.

Year	Loans in being at Beginning of Year	Loans granted during Year.	Loans extinguished during Year.	Loans still in being at End of Year.
—	(liras)	(liras)	(liras)	(liras)
1914.	574,762	689,779	706,826	557,715
1915.	557,715	710,819	716,211	552,323

We will now show the amount for which bills were held on 31 December of each year from 1908, and the relevant average for one bank :

Year	Number of Banks	Loans (liras)	Average for one Bank (liras)
1908.	8	127,753	15,969
1909.	12	220,133	18,344
1910.	13	303,003	23,308
1911.	13	439,505	33,808
1912.	13	517,516	39,809
1913.	12	574,762	47,896
1914.	13	557,715	42,901
1915.	13	552,323	42,486

The progress of loans affords another proof of the constant development of the banks of the Lodi district and the effectiveness of their growing activity.

The credit granted by the rural banks does not serve only for working expenses but also for the purchase and improvement of land. Frequently it has been used to round off a little property, to better its technical and economic equipment. Yet in single cases the credit given is trifling. At the end of 1915 the total value of the securities was 552,323 liras represented by 1,233 bills, each bill having thus an average value of 450 liras.

The rural banks do not employ their funds merely to make loans secured by signed bills. They use them also for the purchase of agricultural goods on account for their members and at their order. The banks pay for the goods on delivery in cash ; the members repay their price generally at harvest time. Credit given for goods thus delivered to members is, if its amount have not been repaid by the member receiving it before the end of the financial year, covered by bills which are added to those held for loans. The rate of interest on loans is generally fixed by that usual in the other local banks. It is equal to such rate or lower than it by a half or one per cent. During 1915 the rate charged in two of the rural banks was 5 per cent. ; in five of them it was 5 $^1/_2$ per cent. ; in one 5.75 per cent. ; in four 6 per cent. ; and in one as much as 6 $^1/_2$ per cent.

Deposits in other banks. — The rural banks deposit the sums at their disposal in excess of the demand for credit on current account bearing interest. Such sums thus feed the credit which is employed by the largest agricultural, commercial and industrial enterprise in the district as by that of medium importance. The rural banks collect savings and remit them. Their profit is constituted by the small difference existing between the rate of interest they pay to their depositors and that which they obtain from other banks. The following data concern the two last years :

On 31 December	Current Credit Accounts in other Banks (liras)
1914.	120,334
1915.	208,151

Most of these deposits in other banks brought to the rural banks in 1915 interest at the rate of 4 per cent.

Title Deeds. — Transactions regarding title deeds are inconsistent with the character of the rural banks and the figures representing them are unimportant. The total value of the State title deeds held by the rural banks was 12,960 liras on 31 December 1914, and 38,645 liras on 31 December 1915.

§ 2. Other forms of activity practised by rural banks.

The development of the rural banks has allowed them to practice activity outside their principal and characteristic function of affording credit. We will examine this extraneous enterprise briefly.

Co-operation for purchase. — Rural banks in other districts, as those of Bologna, state in their by-laws that it is part of their task to undertake the collective purchase of articles of agricultural use on behalf and at the order of their members. In the Lodi district, however, this work is accomplished by distinct associations, called *unioni rurali*, which are not legally constituted and which always depend for support on the rural banks where these exist. Nevertheless even here some rural banks accomplish direct collective purchases of manures and seeds. Thus in 1915 three of them bought goods to the value of about 13,000 liras : if to this be added the value of the goods bought by the unions employing means provided by the rural banks, a total of 34,000 liras is obtained. The rural banks also buy agricultural machines which their members are able to use. We will not enumerate the machines of comparatively small importance which they have bought — such as harrows, manure-sprinklers, sowers — but we note the purchase by the rural bank of Orio Litta of a threshing-machine and its engine, costing 6,000 liras, for the use of the section of small landowners which it has founded. This machine was used during the summer and autumn agricultural season of 1915 by a large number of local small proprietors and tenant farmers. The Ministry of Agriculture has lately granted a subsidy of 1200 liras to this section.

Co-operation for sale. — The most notable experiment in this sphere was made by the rural bank of Gradella. In 1915 it took over all the hay of its small tenant farmer members and disposed of it at a price greater by 1.25 liras a quintal (1) than that which they could have obtained them-

(1) 1 quintal = 1 cwt. 3.874 qurs.

selves had they sold it individually, in small quantities, according to their custom. The same transaction was accomplished in 1916.

Further since 1912 this rural bank has taken it upon itself to act as agent for the business in silkworms' eggs. It distributes annually about 200 ounces of the eggs to its members, procures for them the necessary mulberry leaves and undertakes the sale of the product. The profit which the members derive, as compared with that accruing to them previously, is notable.

Finally this rural bank maintains a granary for the use of its members and last year it also maintained a special dépôt for wheat. It advanced the price of their wheat to its members to enable them to meet, in view of the especial conditions arising from the war, all eventualities.

Collective farms. — The rural bank of Gradella, just mentioned, has further evolved a system which will be called *affittanze collettive*, not very appropriately although the name expresses the ends truly reached. This system has in fact succeded in superseding the former annual leases by leases of larger farms, sufficient to support the farmers' large families, for a term of six years.

The *affittanze collettive* has with the support of the rural banks advanced to the members a portion of their rent and necessary stock, varying from a half to three quarters ; groups of labourers have obtained on lease land having a total area of 3,000 Milanese perches (1) and distributed among twenty-two families.

The groups of settlers live on the property together and divide it among the families of each group by contracts among themselves, sometimes after drawing lots, and with the aid of an expert and the representative of the rural bank. They are obliged to insure their live stock and their harvests. The rural bank has caused the birth of a special form of mutual insurance. As security for its loan it reserves to itself in the contract the right to make annually, by means of its agents, two inventories of the property and these are discussed in a special meeting. It is further judge of a settler's technical capacity and of his farming procedure, and has the right to supersede him if he seem ill adapted to his work. The rural bank employs a capital of some 45,000 liras on this enterprises.

Labourers' houses. — In concert with the rural bank, which has granted a current account bearing interest for the purpose, a *Società case popolari anonima cooperativa* (Limited Liability Co-operative Society for Popular Houses) has been constituted at Spino d'Adda. With a capital of only 2,100 liras it has been able to build a house in which fifteen families are lodged and which cost 16,647 liras. On 31 December 1915 the credit of this society amounted to 6,820 liras. It also received as an act of grace a small loan from the Savings Bank of the Lombard Provinces.

Formation of small independent properties. — The rural bank of Miradolo has recently bought hill land having the considerable area of 123 Milanese perches. It has expended on it about 21,000 liras ; and has resold

(1) 1 Milanese perch = about 782.816 sq. yds.

it in small lots to the lessees who occupied it, at cost price plus the cost of the contract.

In yet other ways the rural banks of the district of Lodi have acquired merit. Philanthropic, agricultural and popular institutions, and institutions for the moral improvement of the people, have derived notable help from them and do so still. They are a valuable element of prosperity and well-being in economic and social life in the country.

§ 3. The federal organization of the rural banks.

The rural banks of the district of Lodi are grouped in a diocesan federation which is their co-ordinating and superintending agency, as the *Banca cooperativa piccolo credito S. Alberto* (St. Albert's Co-operative Small Credit Bank) is in some sort their financial centre.

This federation is managed by a council, composed of delegates of the rural banks who meet every year, and by an executive commission. It keeps permanently open a secretarial office which has inspectorial, tutelary, consultative, technico-legal and statistical (1) functions. The order is that of their importance.

Inspections usually take place once a year and aim at a minute taking stock of the economic, financial and legal position of the federated banks. The reports of inspectors are presented to the executive commission who make consequent resolutions.

The function of the secretariat and federation as a guardian, that is the work of developing and perfecting co-operative credit institutions, is most important.

The diocesan federation adhered to the Italian Federation of Catholic Rural Banks at the latter's invitation, and has decided to assume the legal form of a co-operative limited liability society. In this new guise, which will confer authority and rights, it will be able more and more effectively to lead that rural co-operative credit, of which we have described the first results, to the better future which indubitably awaits it.

(1) To this end the federation has recently arranged for a collection of social archives in which all the balance-sheets and reports of the federated banks will be collected. These archives will become more and more a rich and full source of statistical data as to the co-operative movement of credit.

MISCELLANEOUS INFORMATION RELATING TO CO-OPERATION AND ASSOCIATION IN VARIOUS COUNTRIES.

BRITISH INDIA.

CO-OPERATIVE SOCIETIES AND RURAL SANITATION IN MADRAS PROVINCE. — *The Madras Bulletin of Co-operation*, Vol. VII, No. 4, June 1916.

An interesting attempt has lately been made in India to use agricultural co-operative societies for the purpose of effecting an improvement in rural sanitary conditions. The following is its genesis.

Some time ago in commending to the consideration of local boards certain proposals for the construction of protected wells in villages, in order to avoid the contamination of water and thus prevent cholera, the Madras government expressed the view that the rural co-operative societies might with advantage collaborate in the work of sanitary inprovement within the area of their operations ; and announced its willingness to consider the possibility of providing, through the agency of the local boards, grants-in-aid out of provincial revenues, in the event of the registrar of co-operative societies finding such collaboration to be feasible. The registrar advanced no objection, and the government thereupon asked him to choose for the experiment 20 societies in non-union areas, distributed over as many districts as possible. The grants-in-aid made to these 20 co-operative societies amounted to Rs. 17,618. They undertook the making of new wells, the repair of existing wells and reservoirs, the arrangement of drinking wells, the mending of streets and roads, the construction of parapet walls and pulleys for wells and of street drains.

Fifteen of these works have been completed. The presidents of Taluq Boards, in submitting their reports to the government through the registrar, expressed in most cases the opinion that the work has been satisfactorily done, and that the grants-in-aid have been properly spent, having been in some cases supplemented by local contributions. Certain gratuitous services were rendered by the societies and most of their work cost less than the professional estimates.

CANADA.

CO-OPERATIVE MARKETING OF POULTRY IN SASKATCHEWAN. — *The Public Service Monthly*, Vol. V. No. 3. October 1916. Regina, Saskatchewan.

The Saskatchewan Department of Agriculture has announced that it is again undertaking the co-operative marketing of poultry this autumn. Its scheme is to keep open from 13 November to 16 December two receiving and killing stations, one at Saskatoon to serve the northern and another at Regina for the southern half of the province. Poultry farmers throughout the province have been asked to send their birds, whether chickens, turkeys ducks or geese, alive, to whichever of these stations is the more convenient to them.

Experts provided by the Poultry Husbandry Department of the Saskatchewan College of Agriculture supervise the killing and plucking of the birds,their grading acording to quality, and their packing. When they have been received the Co-operative Organization Branch of the Department of Agriculture sends to the farmers a payment in advance, corresponding with theirquality. The poultry are either sold immediately or, if prices be low, are stored until these reach a satisfactory level. When all the birds have been sold the farmers receive every cent of their price, less the cost of carriage, killing, boxes for packing and storage.

RUSSIA.

FINNISH CO-OPERATIVE SOCIETES FOR THE SALE OF LIVE STOCK IN 1915. — *Suonem Osuustoiminthalehti* (*Review of the Co-operative Movement in Finland*). Helsingfors, August 1916.

The seven Finnish co-operative societies for the sale of live stock had 3,232 members at the end of 1915, having increased by 499 members or by 18 per cent. since the previous year. The number of their shares was 19,394 or 1,741 more than in the preceding year, giving an increase of 10 per cent. The amount of business done was almost doubled and covered altogether about 3.5 million Finnish marks. The number of animals sold was 33,936, namely 16,712 horned cattle, 4,191 pigs, 271 horses, 7,099 calves and 5,663 sheep, goats etc. Except 298 horned cattle and 179 horses these animals were all intended for slaughter.

The seven co-operative societies had altogether, at the end of 1915, 785,060 marks to their credit. Their circulating funds had more than doubled since the previous year as a consequence of their acquisition of warehouses and of the increase of their business. Thus all the co-operative societies now manufacture sausages. Except the " Karja " at Tammerfors, which reported a loss of 18,432 marks, all the co-operative societies showed when they closed their accounts for 1915 a profit, but it is smaller than that of the previous year. Their total profit amounts to 69,078 marks.

7

Part II: Insurance and Thrift

GERMANY.

THE CO-OPERATIVE INSURANCE OF THE MILLERS' TRADE IN 1914.

SOURCE:

EXTRACT FROM THE REPORT FOR 1914 OF THE "MÜLLEREI-BERUFSGENOSSENSCHAFT". *Die Mühle*: Nos. 43, 44, 45, 46, 47, 48, 49, 50, 51, and 52 of 22 and 29 October, 5, 12, 19 and 26 November, and 3, 17 and 24 December. Leipzig, 1915.

§ 1. GENERAL REMARKS.

The wages paid in the millers' trade, according to sufficiently complete data furnished by the administration of the trade's co-operative society (1), give an idea of the manner in which it has been affected by the war.

While in 1913 the total wages paid in the mills insured by the trade's co-operative society amounted to 71,187,887 marks (2), their amount was in 1914 only 68,042,300 marks, giving a decrease of three million marks. Since this decrease has reference only to the first five months of war it may be affirmed that the total production, which is fairly well reflected in the movement of wages, was lowered by ten per cent. in that period.

The diminution was continued in 1915 and was encouraged by the circumstance that the stock of material delivered at the mills had been exhausted and that it had been impossible to obtain subsequent supplies in sufficient quantity. This is particularly the case where rice-mills and mills for

(1) We remind the reader that the trade co-operative societies (Berufsgenossenschaften) are associations for insurance against accidents which group industrial workers following one trade or analogous trades. They are organized on the basis of mutuality.

(2) 1 mark = about 1s at par.

oleaginous grains are concerned, and the latter show considerable retrogression. The wages they paid amounted to thirteen million marks in 1913 but fell to eleven million in 1914, sinking thus by more than a third during the last five months of the year. The dearth of oleaginous grains, which Germany derives for the most part from foreign countries whence the blockade now cuts her off, will come to be more felt as the war continues, a fact of which the report for the following year will doubtless give a tangible proof. It may be generally affirmed that since excess production has diminished by thirty-five per cent. profits have suffered a like reduction, the more so because the increased price paid for milling in no way compensates for the extra working costs.

The administrative staff has also not escaped the effects of the war, but rather has suffered from it very much, a large number of its members having been called up for the army. The engagement of women as auxiliary workers has however filled so many vacancies, that business has been able to continue without noticeable disturbance.

The *organism* of the co-operative society has not been modified. The administrative body comprises five members of the society's committee, eighty-five members of the committee of the sections, sixty-four delegates, 711 trustees and fifty-five inspecting accountants, that is 919 in all.

The *meeting* for 1914 was held at Cologne on 7 July and gave an opportunity for resolutions regarding the society's budgets, modifications of the rules for insurance against accidents, etc.

§ 2. Financial statement for 1914.

The following are its items :

	Marks.
Assessments for 1914	1,929,366.80
Fines	10,029.80
Supplementary assessments	36,904.52
Anterior assessments	4,213.64
Society's funds	10,302.17
Claims for re-indemnity (§ 903 and 1542 R. V. O.)	23,464.36
Repayment of pensions paid	14,710.06
" " costs of attention during period of waiting	541.41
Interest (deduct 19,332.31 marks by which expenses are less than in 1913)	301,027.41
Credit of various members	4,520.17
" " Section 8	1,115.93
Carry over . . .	2,336,196.27

	Marks
Carried over . . .	2,336,196.27
Costs of administering the co-operative society by members' payments	199,567.51
Costs of administering the sections covered by members' payments	146,764.65
General costs covered by members' payments . .	58,441.10
Carried forward (deduct the balance of preceding year, 105,936.16 marks)	1,640,063.84
Reserve	8,192,491.86
Working fund	60,000 —
	12,633,525.23

Expenditure:

Balance owing from members' assessments for 1913	1,944,879.66
Costs of administration of the co-operative society	201,874.99
" " " " " sections.	137,420.16
" " inspection in cases of accidents	39,752.41
" " " " " " " and report by insurance officials	749.48
" " cases submitted to higher offices of insurance	5,643.91
Indemnities paid	1,640,063.84
Costs of medical treatment	2,370.85
Credit with sections	12,590.67
" " technical superintendence officers .	148.71
" " the savings bank	328.24
" " " Seehandlung	274,263.23
" " " Bank of Empire	29,945.41
" " " Accounts Office for Postal Cheques	4,640.61
Balance in hand on 31 December 1914	13,121.05
500,000 marks of consol. Prus. Stock at 4 % .	492,500 —
2,501,550 " " " " " " 3 ½%	2,643,538.47
5,967,500 " " " " " " 3 % .	5,189,693.54
	12,633,525.23

§ 3. Condition of finances.

Reserve of the co-operative society on 31 December 1913	8,274,988.24
Payment according to § 673, line 2, R. V. O . . .	2,642.94
	8,277,631.18
Share of the reserve paid to trade co-operative societies (by § 673, line 2, R. V. O.)	85,139.32
On 31 December 1914	8,192,491.86

This reserve was invested in

	Consolidated Prussian Stock.	Nominal Value (marks)	Current Value (marks)	Purchase Value (marks)
	—	—	—	—
a)	4 %	500,000	450,000	492,500.00
	3 ½ %	2,501,550	2,101,302	2,643,538.47
	3 %	5,795,900	4,296,600	5,056,125.15
				8,192,163.62
b)	in the Savings Bank of Schöneberg town . .			328.24
	Financial condition 31 December 1914			8,192,491.86

The *working funds* of the co-operative society amount to 60,000 marks. The real estate forming the site of its offices at Berlin-Friedenau has a cash value of 106,030.60 marks.

§ 4. Costs of administration.

a) *Costs of Administration of the Society and Budget for* 1916: The following are its items:

	Costs of administration (1914) Marks	*Budget* (1916) Marks
Superintendence of businesses.	30,837.87	35,000 —
President's salary	8,000 —	8,000 —
Travelling expenses of committee members	2,139.91	4,500 —
Cost of meeting of co-operative society	10,714.64	14,000 —
Insurance of agencies of " "	352.44	700 —
Salaries and wages.	97,903.35	98,000 —
Travelling expenses of employers . . .	291.54	600 —
Pensions, annuities to widows and orphans	10,464.60	10,500 —
Insurance premiums for employees . .	553,16	550 —
Rents, heating and lighting	9,859.70	4,000 —
Printing	7,363.45	9,000 —
Office necessaries	579.07	700 —
Office material	49.75	400 —
Books	311.10	400 —
Cost of publications	—	50 —
Postage, telegrams.	11,393.86	10,000 —
Other costs of administration.	632.88	2,500 —
Interest on mortgages, taxes, repairs .	10,301.17	4,500 —
Costs incurred by representatives in enquiries as to accidents	—	300 —
Costs incurred for cases submitted to the Insurance Office of the Empire . . .	80.50	300 —
Total . . .	201,874.99	204,000 —

The budget was made out, as regards both its separate items and its total, on the same basis as in 1915.

b) *Costs of Administration of the Sections:*

These were less by 9,344.49 marks than in 1913. They are distributed among seventeen sections and amount to 137,429 marks (146,764.65 marks in 1913).

§ 5. Assessments and method of levy (1).

The members were liable to be assessed (*Umlage-Soll*) for a sum less by 259,773.46 marks than in the preceding year. This good result is chiefly due to the fact that, owing to a considerable postponement of the date for paying indemnities, a sum of 105,936.16 marks remained of the advance paid to the Post Office, and that the advance to be paid in 1915 could be reduced by 105,000 marks. Further it was posible to deduct from the assessment of members surplus interest amounting to 39,419.76 marks. The members were liable to be assessed for 1,685,106.30 marks, distributed among the items which will be cited. The advance to be paid to the Post Office (§728 of R. V. V. O.) was of 1,641,000 marks. The indemnities paid in 1914 amount to 1,640,063.84 marks, giving an excess of 936.16 marks, which constitutes an advance. Amortization and interest on floating debt (§ 779 of R. V. O.) 67,243.38 marks; a sum of 100,000 marks to be provided to feed the working fund; 2,370.85 marks paid, without the intervention of the Post Office, for medical treatment; 40,501.89 marks paid in 1914 for costs of enquiries and reports in cases of accidents; 5,643.91 marks for the cases submitted to the higher offices of insurance; 201,874.99 marks for administrative costs of the co-operative society in 1914; 4,809.55 marks for assessments not payable for 1913; 10,709.64 marks for assessments of members

(1) We recall the fact that the system on which insurance of this type (*Umlageverfahren*) is based consists in distributing each time, as premiums, among all the insured, the sum to be paid as indemnities (whether following on accident, fire, a fall of hail, death, etc.) and in levying, in the form of an assessment, the share falling on each insured persons (insurance based on mutuality). This system is seen to be in opposition to that which determines the premium beforehand and calculates it according to the incidence of loss and level of risk and the sum to be paid. When this sum increases it constitutes, in the form of invested premiums, a reserve to meet later augmented needs and to enable the distribution of alterations as regularly as possible (*Kapitaldeckungs oder Anlageverfahren*). It should be added that under the system based on distribution indemnities are paid in the form of advances, when documentary evidence of the loss emanating from the insurance agencies has been produced by the Post Office of the place in which the insured person lived at the time of the accident.

consequent on distribution of 1913 and not paid on 28 February 1915: giving a total of	2,074,154.21	marks
From this must be deducted: 105,936.16 marks, being the unused amount of the advance paid to the Post Office in 1914; 10,029.80 marks for unpaid fines; 36,904.52 marks for ulterior payments; 320,359.72 marks of interest; 4,213.64 marks for receipts under the head of anterior assessments; 10,302.17 marks for landed property; 23,464.36 marks for claims to reindemnification according to §§ 903 and 1542 of the R. V. O.; 14,710.06 marks for restitution of annuities; 541.41 marks for reimbursement of costs paid in the period of absence of assets; and for costs paid during this period 6.33 marks as the excess emanating from the union of the figures of the different accounts of 1913, in all . . .	526,468.17	"
Remainder	1,547,686.04	marks
Cost of administration of sections in 1914	137,420.16	"
Hence the assessments of the 17 sections amount to .	1,685,016.20	marks

Or, in other words, the sections must together find for 1914 a sum of 1,547,686.04 marks to meet the charges of the co-operative society, and 137,420.16 marks to meet their own charges, that is 1,685,106.20 marks in all.

§ 6. List of the mills and its alterations.

The list of the mills enrolled by the co-operative society comprised, on 31 December 1914, 23,933 as against 24,409 on 31 December 1913. There had thus been a diminution of 476. The membership of 234 mills was given up to other co-operative trade societies and twenty-two were taken over by other enterprises. Many of the other 264 mills no longer permanently employ persons compelled to insure. We leave out of account the mills obliged temporarily to suspend their activity owing to the war. The number of insured persons, including those insured in virtue of §§ 53-54 of the by-laws, has passed from 62,117 to 57,405, being thus reduced by 4,712. The following are all the mills which occur on the list of 31 December 1914:

Mills for Cereals having as Motive Power	Total		Alterations	
Wind	6,769		— 137	
Water	12,559		— 574	
Steam	1,704		+ 133	
Water and steam	2,392		+ 120	
		23,424		— 458
Mills for oleaginous grains	377		— 9	
Mills for hulling barley	31		— 1	
" " chopping straw	93		— 8	
Rice mills	8		+ 0	
		509		— 18
		23,993		— 476

The mills for oleaginous grains include thirty-one worked by animal power ; and among those for hulling barley, as among those for chopping straw, there is one mill so worked.

In the year which we are reviewing 2,208 such administrative transactions as new enrolments, transfers, expulsions and resignations took place (2,958 in 1913). Since 1885 a total number of 118,361 enrolments have been discharged.

§ 7. Personal insurance of employers and insurance of other persons.

The year 1914 brought two new personal insurances (§ 53 of the by-laws), their number passing from 210 to 212, and a very slight reduction in the insurance of other persons (§ 54 of the by-laws), the figure representing which passed only from thirty to twenty-nine.

On 31 December 1914 there were 212 personal insurances for an insured sum of 286,278 marks; and twenty-nine insurances according to § 54, comprising eighty-five insured persons and insuring 181,474 marks.

§ 8. Statistics of accidents.

We give some data taken from the ample documentary evidence in this connection which is contained in the report.

a) *Number of Accidents (since* 1885-86).

The number of accidents intimated, in the case of which the benefit of insurance has been enjoyed, since the foundation of the co-operative society, is seen from the following table:

Year	Number	Number indemnified for the first time	
		total	%
1885/86	1,627	371	23.4
1887	1,716	515	30.0
1888	1,922	624	32.5
1889	2,323	650	27.9
1890	2,335	721	30.5
1891	2,360	793	33.6
1892	2,413	709	29.4
1893	2,674	899	33.6
1894	2,860	843	22.3
1895	2,965	844	28.5
1896	3,002	949	31.6
1897	3,046	1,007	33.1
1898	2,920	992	34.0
1899	3,046	1,048	34.4
1900	2,924	985	33.3
1901	3,023	991	32.8
1902	3,035	1,003	33.1
1903	3,340	1,073	32.1
1904	3,277	1,089	33.2
1905	3,370	1,068	31.4
1906	3,312	1,008	30.4
1907	3,360	1,027	30.6
1908	3,262	1,015	31.1
1909	2,281	894	27.3
1910	3,226	876	27.2
1911	3,367	886	26.3
1912	3,269	914	37.1
1913	3,447	855	24.8
1914	3,268	699	21.4
Total	83,970	25,348	30.2

b) *Distribution among Different Classes of Mills of Accidents indemnified for the first time in* 1914 :

Class of Works	Death	Disablement			Total
		permanent		temporary	
		total	partial		
Mills for cereals	39	—	126	289	454
» » oleaginous grains	8	—	40	62	110
» » hulling barley	—	—	1	3	4
Rice mills	1	—	4	8	13
Mills for chopping straw	—	—	1	—	1
Oil refineries	—	—	—	1	1
Distilleries	1	—	—	—	1
Threshing works	—	—	2	3	5
Starch and vermicelli factories	—	—	2	1	3
Concentrated forage »	—	—	—	1	1
Vegetable butter »	—	—	1	—	1
Colour factories	—	—	—	1	1
Bakeries	—	—	—	4	4
Sawmills with or without circular apparatus	3	—	32	51	86
Various works	1	—	10	3	14
Total	53	—	219	427	699

c) *Types of Injury suffered and their Results.*

Nature of Injury	Death	Disablement			Total	
		permanent		temporary		
		total	partial			%
1. Wounds;						
to the head, eyes	13	—	14	24	51	7.30
to arms, hands, fingers	2	—	107	214	323	46.20
to legs, feet	5	—	53	111	169	24.20
to other parts of the body or multiple wounds	28	—	45	78	151	21.60
2. Deaths by immersion	3	—	—	—	3	0.42
3. Asphyxiation	1	—	—	—	1	0.14
4. Other causes	1	—	—	—	1	0.14
Total	53	—	219	427	699	100.—
%	7.6	—	31.3	61.1	100	— —

The average number of persons insured in the seventeen sections of the millers' co-operative trade society is 57,405, and the number of the injured is 12.18 of every thousand of the insured.

d) We omit the *distribution of the accidents and the charges incumbent on the co-operative society classified according to the importance of mills.*

e) *Date and time of accidents* : The following figures, taken from the statistical data, show the distribution of accidents among days of the week :

	1889-1914		1914	
	Total	%	Total	%
Sunday	906	3.8	17	2.5
Monday	4,037	16.9	126	18.0
Tuesday	3,820	16.0	112	16.0
Wednesday	3,607	15.1	106	15.2
Thursday	3,637	15.3	109	15.6
Friday	3,812	16.0	119	17.0
Saturday	4,018	16.9	110	15.7
Total . . .	23,837	100.0	699	100.0

The following table shows the date and hour of the 699 accidents of 1914 :

	Month		Hour			
	Total	%	A. M.		Total	%
January	77	11.1	12 — 3	11		1.6
February	48	6.9	3 — 6	18		2.6
March	57	8.1	6 — 9	105		15
			9 — 12	178		25.4
April	52	7.4			312	44.6
May	50	7.1	P. M.			
June	41	5.9	12 — 3	108		15.4
July	53	7.6	3 — 6	178		25.4
August	52	7.4	6 — 9	69		0.0
September	51	7.3	9 — 12	32		4.6
October	69	10.0			387	55.4
November	64	9.1				
December	85	12.1				
Total . . .	699	100.0			699	100.0

f) *Accidents happening to employers personally insured :* In 1914 three fresh cases were added to those pending. Hitherto 144 accidents happening to employers have been indemnified for a sum of 230,978 marks.

§ 9. Indemnities.

From 1885-86 until the present time 31,961.611.08 marks has been paid. For 1914 alone the sum of indemnities (pensions, costs of treatment, indemnities, funeral indemnities) was 1,620,575.04 marks, but was less by 57,445.99 marks than in the previous year.

§ 10. Various.

a) *Cases in which medical treatment was given in the period of legal absence of assets* : There were fifty-five such cases as against sixty-one in 1913. The cost of medical treatment amounted to 6,608.18 marks as against 4,951.12 marks in 1913.

b) *Claims under the head of liability in virtue of* §§ 903 *and* 1542 *of the R. V. O.* : The co-operative society claimed successfully in 1914 in respect of seventeen cases, as against twenty-two in 1913, its right to reindemnification in virtue of the legal provisions mentioned. Three cases remained in suspense.

The receipts from old and new cases amounted to 23,464.36 marks as against 29,149.89 marks in 1913.

c) *Complaints and appeals* : 311 complaints were lodged as against 357 in 1913 and ninety-three appeals as against 137 in 1913. In the case of the complaints they were compromised 106 times to the advantage of the complainants, and 205 times — as against 221 in 1913 — to that of the co-operative society. As regards the appeals twenty of them — as against twenty-five in 1913 — were decided in favour of the appellants, and seventy-three of them — as against 112 in 1913 — in favour of the co-operative society.

d) *The distribution of risks :* According to the decision of the meeting of the co-operative society in 1906 the various sections should participate in these to the extent of 50 per cent. The matter has no especial interest and will not be the subject of further remarks.

e) *Fines :* These were imposed in 1,606 cases as against 1,953 in 1913, which gives a reduction of 329. The fines imposed for late presentation of the wages lists, or failure to produce them, have diminished by thirty-three ; those for inexact entries in the wages list by 297 ; those for failure to take the prescribed measures to prevent accidents by thirty-two ; those for not having remitted the questionnaire sent to mills by five ; those for failure to

keep wages books by one ; and those for failure to present a wages list according to § 1581 of the R. V. O. by three. On the other hand the fines imposed for lateness in giving notice of accidents or for not giving notice of them have increased by thirty-four ; and eight have been imposed for late registration of businesses or failure to register them. The 1,606 fines have brought in a sum of 12,370 marks.

f) *Statistics of wages :* The average wages have been as follows :

	Marks		Marks		Marks
1897 . . .	703.12	1903 . . .	820.61	1909 . . .	1,007.69
1898 . . .	712.61	1904 . . .	837.94	1910 . . .	1,041.03
1899 . . .	736.12	1905 . . .	861.16	1911 . . .	1,083.14
1900 . . .	749.93	1906 . . .	894.72	1912 . . .	1,144.09
1901 . . .	778.29	1907 . . .	947.69	1913 . . .	1,176.90
1902 . . .	813.77	1908 . . .	974.72	1914 . . .	1,164.49

Thus in eighteen years the regular workmen's wages have increased by 461.37 marks. The sixteen sections number altogether 23,933 businesses employing 57,105 regular workmen who received in 1914 the total sum of 69,991,700 marks in the sections, which gives an average wage of 464.49 marks a year or 3.88 marks a day for each man. (Minimum 1,002.64 marks a year or 3.34 marks a day ; maximum 1,383.62 marks a year or 4.61 marks a day).

g) *Processes at law, failures and forced sales :* The number of employers who were late in paying the sums at which they were assessed by the co-operative societies, and against whom it was necessary to take proceedings, passed from 1,735 in 1913 to 1,469 in 1914. The number of forced sales passed from twenty to ten and that of the intimated failures from ninety-one to ninety-five.

MISCELLANEOUS INFORMATION RELATING TO INSURANCE AND THRIFT IN VARIOUS COUNTRIES.

CANADA.

ALBERTA HAIL CROP INSURANCE. — *The Grain Growers' Guide*, Winnipeg, 6 September 1916.

Before 1911 the Alberta government had a monopoly in insurance against hail, but since that year private companies have been allowed to undertake this branch of business. In 1915 their operations in hail insurance covered $ 14,000 (1). There was an agitation throughout the province, especially among the United Farmers of Alberta, in favour of a scheme for compulsory insurance, to extend over the whole province and be carried out by the government. It was strenuously opposed in certain quarters, particularly by the ranchmen.

In 1913 the legislature passed an amendment to the hail insurance clauses of the Municipality Act, whereby twenty municipalities might, with the approval of the electors, combine to carry on insurance against hail in consenting municipalities. In 1913 twenty-two municipalities came into the scheme, and, four others having since joined it, the land assessed for insurance under its provisions has now an area of 4,500,000 acres. Of this more than 1,000,000 acres were under crop in 1915, and the land was insured for more than $ 6,000,000. In 1915 the hail insurance clauses were repealed and were replaced by the Municipal Co-operative Hail Insurance Act.

Only rural municipalities have power to levy taxes under this Act ; and therefore local improvement districts can benefit by it only if they render their organization municipal. There are two methods of securing admission to the hail insurance district :

1) The council of a rural municipality may at any time pass a by-law uniting itself to the hail insurance district, which by-law must however be submitted to the approval of the ratepayers before it is finally passed.

2) A petition for such a by-law, signed by at least 25 per cent. of the resident ratepayers of the municipality, may be presented to the council before 1 October in any year. It must be read for the first and second time before the council as soon as possible, after which it must be put to the vote at the next ensuing annual election. On receiving the

(1) 1 dollar = about 4*s* 1½*d* at par.

assent of a majority of the council the by-law will be passed by the council before the ensuing 10 January.

The management of the insurance business of a district is vested in three persons, one appointed by the minister of municipal affairs and two by the representative of the municipalities. The board thus constituted meets annually to receive reports and arrange for the following year. It can borrow money to administer the district — although this so far has not been necessary — but not to settle claims, a power reserved to the municipalities. It decides the rate of taxation on the basis of the acreage assessable for municipal purposes. Lands leased from the Dominion government for hay or pasture, lands subdivided into certain blocks and lots, unpatented quarters held as homestead, pre-empted or purchased homestead entry lands having less than 25 acres under cultivation, and certain lands to which the title is disputed, are exempt. The hail tax is due on or before 31 October in each year: a penalty of $ 1 a quarter section is imposed if it be not paid before 1 November, and again if it be still unpaid when such penalty has been added to the municipal taxes. On receiving notification from the board through its secretary-treasurer the council of the municipality is required to pay to the board five per cent. of the total amount of the tax within thirty days, and the balance before 15 November.

No claimant can receive indemnity unless the damage to his crop amount to 5 per cent. of its value, and the maximum indemnity is $ 6 an acre. The damage season is from 1 June to 15 September for wheat and rye and from 16 June to 15 September, inclusive, for other grain crops, cultivated grass, and clover grown for hay. The whole of the crops are insured automatically. All claims must be made within three days of the date of the storm, and the attested claim must be sent by registered mail to the secretary of the Hail Insurance Board, Edmonton. Claims are made on special forms, supplied by the persons in the municipality able to administer oaths. Inspectors view the damage, and if they fail to agree with the claimants the matter is referred to the chief insector.

The awards are paid within three days of 15 November in the year in which the claim is made, promptness in such payments presupposing promptness on the part of the municipalities in paying their tax. The awards are paid in full unless their total amount necessitates an assessment of the assessable land at more than 10 cents an acre. If the latter case occur in any year the claims will be paid *pro rata*. The limit is believed to be quite high enough reasonably to ensure full payment every year. The Act has been so amended that awards can no longer be garnisheed or attached for any purpose, nor assigned except to secure payment of money due for seed from which the damaged crop was grown.

The indemnity in Alberta is $ 6.00 an acre, and the assessment rate was 5 ½ cents an acre in 1914-15.

There was at first some difficulty in settling claims owing to the difficulty of finding experienced adjudicators. Out of 2,127 claims in 1915 appeals arose out of only 49 — or 2 ½ per cent. — and these were later settled by the inspector.

In 1914 the total assessment was for $ 241,844, the losses were $ 191,000 and the administration expenses $ 13,241, leaving a surplus of $ 37,000. The severe drought however left many municipalities unable to pay the amount at which they were assessed, and the board could therefore pay only half the claims, the remainder being paid at the end of 1915. Last year was a very bad one in Alberta for hail. At least seven private companies out of fourteen lost money on Alberta business in 1915, the loss of four being, without administration expenses, greater than the premiums. The total loss for the district in 1915 was over $ 355,000. The assessment had been for $ 248,470 plus $ 37,000 from 1914. The board could therefore pay only 75 per cent. of the awards. The other 25 per cent. has been carried over; and 2 ½ cents an acre, which should enable the board to clear all debts, has been added to the amount at which the land has been assessed in 1916. The grain blockade last year rendered some municipalities unable to pay the sum at which they were assessed at the proper time, which occasioned more dissatisfaction. The responsibility really belongs to the municipalities who have not paid all they owe.

During the last three years the respective total losses have been 6.4 and 6.3 per cent. of the insured value. The latter in 1915 was over $ 20,000,000 and the loss was $ 1,297,462. Municipal co-operative insurance against hail is really the cheapest form of insurance yet devised. If however a reserve fund is to be built up, as should be the case, the amount at which land is assessed should be raised or the indemnity reduced. No district in the West is immune from damage. The board believes that if the scheme be generally taken up by the municipalities its cost will work out at much less than that of any other form of insurance.

GERMANY.

LIFE INSURANCE OF THE INSTITUTE OF THE PROVINCE OF EASTERN PRUSSIA AT KOENIGSBERG IN 1915-1916. — Der Deutsche Oekonomist (*The German Economist*). Berlin, 22 July 1916.

In spite of the many economic difficulties in the way of life insurance, which began to lessen slowly only in February 1915, and in spite of the increase in the number of deaths consequent on the war, the Life Insurance Institute of the Province of Eastern Prussia has progressed satisfactorily. Insured capital has increased by 1,591,342 marks (1) in the department of ordinary contracts and 138,057 marks in that of popular insurance, giving a total increase of 335 policies for 1,729,399 marks. If the decrease resulting on deaths, failures, repurchases etc : be deducted, the net increase is found to be one of 167 policies for a sum of 1,002,629 marks, 79,741 marks of this sum representing popular insurances. The financial result is satisfactory : the excess profit of 52,017 marks (of which 1196 marks represents popular insurances) is almost double its amount in 1914-1915 and slightly higher

(1) 1 mark = about 1s at par.

than it was in time of peace, in 1913-1914. The general and the war reserve funds have not been brought under contribution to meet the demand made by deaths due to the war, but have on the contrary been considerably enlarged from the excess profit: of the 52,017 marks of the latter 12,705 marks have been paid into the reserve fund and an equal sum into other reserves; the remainder, namely 26,607 marks, has been paid into the reserve for insured persons under the head of profits, and this reserve now amounts to 76,000 marks.

The amount of costs of administration has continued in 1915 to be lowered in proportion to that of premiums received: it was equivalent in 1911 to 42 per cent. of the premiums received, in 1912 to 28 per cent., in 1913 to 23 per cent., in 1914 to 18.3 per cent., in 1915 to 14.6 per cent, or 13.8 per cent. if the premiums insuring income, and only 12 per cent. if sums received as interest, be taken into account.

The Institute has had to register in the year in question 27 deaths consequent on the war of persons insured altogether for 452,183 marks, as against eighteen such deaths of persons insured for 319,400 marks in 1914-1915, and also seven ordinary death of persons insured altogether for 56,000 marks as against seven insured for 77,000 marks in 1914-15. Of these sums 103,628.85 marks for deaths consequent on the war, and 28,000 marks for ordinary deaths, that is a total of 131,628.85 marks, has to be paid by the Institute (as against 113,000 marks in 1914-1915), the excess being covered by reinsurances. If deaths consequent on the war be deducted, the proportion of deaths which have occurred during the five years of the existence of the Institute is entirely normal. During the peiod 1911-15, for which insurances were effected, 22 ordinary deaths caused the Institute to pay 96,000 marks, and the 45 deaths resulting on the war in the two years 1914-1916 have entailed a payment of 184,628.85 marks. The Institute is largely reinsured and therefore is protected for the duration of the war from over heavy losses. The fact that 773,000 marks has already been paid for losses by the war, mostly, as regards the nature of insurances effected, to the parents of agriculturists of East Prussia, has justified the existence of the newly established Institute.

Of insurances in force at the end of 1915 1425, having an insured value of 18.1 million marks, were life insurances of landowners in the debt of the Institute. There will be further encouragement to enter into such contracts in the by-laws of the urban office as to the pledging of real estate. The establishment of this office was decided on by the provincial council in March 1916, and it provides for mortgage premiums for life insurances.

The investments of the Institute have been modified by the war in so far that loans on mortgages have been almost entirely replaced by subscriptions to the war loans. Only eight loans on mortgages, amounting to 53,850 marks, have been made; five of them, totalling 38,750 marks, being on agricultural land. Up to the end of 1915 323 mortgage loans for a sum of 1,734,735.20 marks had been made. The payment of interest has been satisfactory in spite of the war, and it has not been necessary to guard against

losses resultant on mortgages. The Institute has on its own account participated in the war loans to the extent of 1,150,000 marks.

The policies in force at the end of the year were 2121 policies of life insurance, insuring a sum of 24,430,036 marks, and 62 policies insuring a life interest at the end of a fixed term of years, that is a total number of 2183 policies which insured altogether 24,755,202 marks, as against 23,823,314 marks in 1914 and 19,884,504 marks in 1913. In the department of popular insurance the number of policies passed from 810 and the insured sum from 518,426 marks in 1914-15, to 905 policies and 598,167 marks in 1915-1916. Of eleven deaths in this department four were consequent on the war. At the end of 1915 the Institute had in force life insurance policies to the numbr of 3,088 and the insured value was 25,353,369 marks — as against 24,350,740 marks in 1914 and 20,032,391 marks in 1913 — and 93 policies insuring life interest amounting to 51,575.57 marks a year.

The number of bonds of 10 marks for individual insurance issued by the *Mutual War Insurance Society of East Prussia*, instituted in September 1914, was 20,812 up to the end of May 1916, and for collective insurance 5,884. To this 39 bonds of 5 marks for collective insurance should be added, so that altogether, if the fund for voluntary gifts be also taken into account, a total of 308,891.71 marks has been paid. Up to the end of May 342 deaths, representing 832 bonds of 10 marks and one of 5 marks, had been declared; and as much as 7.5 times the amount paid for a single bond has been paid, according to their needs, to the assigns of a deceased person. The *Mutual Loan Insurance Society of East Prussia* has joined a *Union of War Relief Funds*, which has been formed by the other provincial institutions having the same aim as itself in order to share risks, and of which the management has been undertaken by the German Union of Public Institutions for Life Insurance. The War Relief Funds which have joined this union have, since the beginning of May 1916, issued bonds for 7.5 million marks; and seven other similar funds which have not adhered to it have issued bonds for some 5 million marks.

GREAT BRITAIN AND IRLAND.

MUTUAL INSURANCE OF MILCH COWS. — *The Irish Homestead*, Vol. XXIII. No. 39 Dublin, 23 September 1916.

Co-operative insurance of live stock is almost unknown in Ireland, but a single experiment in it, due to the initiative of the manager of the Whitecross Society and run by very simple and easily understood methods, has had excellent results.

This society was founded six years ago for the mutual insurance of milch cows, and aims at insuring the farmers supplying the co-operative creamery of Whitecross against the death of their cows. Its activity is

thus limited, but within its sphere its operations are conducted admirably. The contributions of members are fixed annually and based on the value of the milk they supply, being computed at the rate of sixpence for every pound's worth of milk. This rate allows an average mortality of 2 per cent.

Every member must insure all his cows, and if one of them fall ill he must immediately notify the manager of the society, stating the nature of the illness so that a veterinary surgeon may give his attendance if necessary. The fee of the surgeon is paid half by the owner of the cow and half by the society.

The idea of providing compensation on the value of the cow as a milk producer is original. If a cow die the amount of compensation payable is two thirds of the average value per cow of the milk supplied by the owner's herd during the preceding year, multiplied by two. Thus if a farmer have ten cows and have supplied to the creamery milk of the total value of £ 100, the average value per cow is £ 10 — two thirds of which sum being doubled gives £ 13. 6*s*. 8*d*. as the amount to be paid to him in case a cow die. The hide of the animal belongs to the society.

If a member sell his milk otherwise than through the society, and without the written consent of the committee, he forfeits his right to compensation while he continues such selling.

This system of mutual insurance has won the approval of the local farmers, so that the number availing themselves of it has doubled and now includes more than half the members of the society. From June 1910 to December 1915 the society's receipts for insurance were £ 83. 8*s*. 8*d*. and a credit balance of £ 8. 5*s*. 1*d*. remains after paying £ 75. 3*s*. 7*d*. in compensations.

The premiums are easily collected, being deducted from the monthly cheques for milk supplied to the creamery, and all the trouble and expense which usually attend collection are thus avoided; exactly as all disputes as to the amount of compensation due are effectually barred by the basis chosen for its calculation.

The Irish Agricultural Organization Society, which has made great efforts to introduce insurance of live stock into Ireland, has interested itself particularly in this method of insurance. It might be conveniently followed by any co-operative dairy or any federation of dairies.

ITALY.

THE TUSCAN FEDERATION OF MUTUAL LIVE STOCK SOCIETIES. — *L'Agricoltura Toscana*, No. 15, Florence, 30 September 1916.

On the 16th of last June a federation of mutual live stock societies was constituted at Florence, on the initiative of the *Ufficio regionale toscano per la mutualità agraria*, its aim being " to stimulate, to render uniform and to

co-ordinate the action of the small local societies for the mutual insurance of live stock, with reference to improvement in zootechnical production; and also partially to indemnify the federated mutual societies for mortality among live stock ". As appears from the by-laws of the federation the mutual societies can reinsure with it a quarter or half the risks they have assumed. To reinsure a quarter of these risks they pay 25 per cent. of the premiums they have received into the federal fund and the federation then is responsible for the loss incurred by every casualty in so far as it pays an indemnity equal to 25 per cent. of that for which a mutual society has become liable. To reinsure a quarter of their risks the mutual societies similarly pay 45 per cent. of the premiums they have received, and the federation then assumes 50 per cent. of the liability they incur by a casualty.

Further at the end of every financial year half the profits of the federation will be paid into its reserve fund, while the other half will be repaid to the mutual societies and deducted from the premiums due for the ensuing year, so that by paying only the difference between the two sums a federated mutual society will pay the normal premium.

This federation began work on 1 July. It had then enrolled nine federated mutual societies, paying their contributions and representing altogether 3,321 heads of live stock insured for 2,070,875 liras (1), as can be seen from the following figures:

Site of offices of mutual societies	Heads of live stock insured	Insured value in liras	Percentage of insured value reinsured
Alta Staggia	422	286,000	50 per cent.
Ambra	500	364,000	25 » »
Canonica a Cerreto. .	327	236,000	25 » »
Modigliana	300	230,000	25 » »
Porcari	112	70,000	25 » »
Prato	400	260,000	50 » »
San Quirico d'Orcia .	570	343,000	25 » »
Tizzano	310	220,000	50 » »
Valtriano	80	61,875	50 » »
Total . . .	3,321	2,070,875	

The societies of Colle Val d'Elsa, Uzzano, Poggibonsi, Castrocaro, San Marcello Pistoiese etc. have successively adhered to the federation.

The federation proposes not only better to distribute the risks and balance the accounts of its adherent mutual societies, but also to carry out a large and complicated work of zootechnical improvement which will be initiated after the war. The federation will soon acquire a legal form.

(1) 1.2611 liras = 1s at par.

UNITED STATES.

THE "GRANGE" AND MUTUAL INSURANCE AGAINST FIRE. — Rittenhouse (J. H.) *Pennsylvania Grange News*, Chambersburg, Vol. XIII. No. 1, May 1916.

Mutual insurance against fire is important in Pennsylvania, where there are now about 275 commercial, industrial, rural or other fire insurance companies, conducted by various methods.

The South Western Mutual Fire Association of Fayette County insures only rural property. It is a child of the farmers' association called the "Grange" and a remarkable product of "Grange" activity.

It was founded in 1894 by the effort of a few members of German "Grange" No. 785, who sought to procure cheaper and more satisfactory insurance than that supplied by the ordinary companies. It received its charter in 1895 when its policies in force were already of the value of $ 200,000. The progress of its business, due at first to active canvassing by its agents, was maintained by the attraction of its growing importance, by the support of members of the "Grange", by its sound organization, and, above all, by the low rates of its premiums.

The insurance company is, as we have stated in an article on the "Grange" (1), kept independent of the latter organization administratively, as a measure of precaution. Its by-laws provide that only "Grange" members of good standing may insure with it, and that reports of its business shall be made, and elections of its directors take place, in Pomona Grange meetings.

The following is a brief summary of the methods of this mutual insurance company.

Each subordinate "Grange" is authorized by the insurance company to elect one of its members as "solicitor" to take applications for insurance. Any prospective applicant is furnished by him with a form, on which are set out rates, stipulations and important questions to be answered both by the applicant and by the "solicitor"; and which, when filled up, constitutes according to the by-laws an important part of the insurance contract. A premium note attached to the form must be signed by the applicant as security for his payment of assessments for losses occurring during the term of the policy, which is five years. The expiry of the policy and payment of the assessments render the note void. The amount of the premium note depends on the value insured, being established as follows :

(1) Issues of June and October 1915.

Barn — cash value $3,000 (1) ; sum insured $ 2,000 rate 7 %		$ 140.000
House — cash value $ 3,000 ; sum insured $ 2,000 ; rate 4 %		$ 80.00
Amount of note . . .		$ 220.00

Three per cent. of the amount of the premium note plus $ 1.50 for the cost of a survey and the policy must be paid at the time of application. Thus the initial cost of a five years' policy for these buildings would be $ 8.10 of which the "solicitor" would retain $ 1.00 for postage and his work.

The buildings in this supposed case are assumed to be 75 feet apart and could be insured up to $ 2,500 each, provided that this amount were not more than two thirds of their cash value. If they were less than 75 feet apart they would be considered as giving one risk instead of two, and the insurance on both could not exceed $ 2,500 — the limit for one risk.

This house is reckoned as giving a first class risk, being furnished with a slate metallic roof and well constructed chimneys, and having no stove pipes passing through floors or partitions. Otherwise the rate would be higher than 4 per cent. No buildings having stove pipes passing through side walls or roofs, or buildings situated in towns or villages, are accepted for insurance.

Before policies are issued the applications must be examined and approved by the secretary and two other members of the board of directors, appointed by the president as the executive committee.

At the close of the calendar year the secretary takes the aggregate amount of the premium notes as the basis on which to calculated the levy for assessments to meet the liabilities of the company.

Some mutual societies set aside a surplus with which to meet losses, but this company prefers to borrow money as need arises, and assess the levy to cover such loan at the end of each year. As most of the heavy losses occur in the latter part of the year and payment is not due until two months after a loss occurs, the money is not borrowed for an average period of more than six months, and therefore the average rate of interest paid on it is not more than three per cent. The insured persons prefer to keep their money for the year, the use of it bringing them in certainly three per cent. Moreover the company in thus avoiding a surplus avoids income tax.

The costs of administration are rendered very slight by this method of mutual insurance. The "solicitors" receive only $ 1.00 for each application for a five years' policy, this fee covering inspection of the insured property. The president gets no salary ; the secretary, who also acts as treasurer, is allowed fair pay ; the directors are paid for their time and expenses : these costs together with incidental outlay — on printing, postage and so forth — bring the administrative costs to an average of less than $ 1.00 a year for each member. Beyond this all money paid by policy holders goes to compensate for losses. No hazardous business is undertaken ; and

(1) 1 dollar = about 4*s* 1 ½*d* at par.

in order to avoid large conflagrations town and village property is not insured.

At the end of 1915 the liabilities of the company amounted to $ 5,807.38 and premium notes to the amount of $ 230,279.00 were held as security for payment. The notes were guaranteed by the buildings, insured at two thirds of their value — in the aggregate more than four million dollars.

Thus this mutual insurance company, a child of the " Grange ", is seen to be in an excellent position.

Part III: Credit

UNITED STATES.

THE FEDERAL FARM LOAN ACT.

Since the passage of the Smith-Lever Extension Act in 1914, no agricultural question, among the many pending before Congress, has aroused more widespread interest than that of the provision of more adequate rural credit facilities. During this period, scores of bills, embracing a broad range of remedies, have been proposed. Commissions, both State and national, official and unofficial, as well as the United States government, the agricultural colleges, organizations, and individuals have studied the subject in its various phases in the country and abroad. At length public opinion has sufficiently crystallized to make possible the enactement of a law designed to initiate a Federal system of rural credit based upon farm real estate, and the result is the Federal Farm Loan Act, approved on 17 July by President Wilson.

The passage of legislation of this sort constitutes a notable recognition of American agriculture in a new direction. By the establishment of the Federal Department of Agriculture and the system of agricultural colleges and experiment stations, and the appropriation, for many years, of large funds to carrying on and extending the activities of these institutions, the principle of Federal aid to agriculture by such means as education, systematic research, and the demonstration of improved methods has come to be firmly accepted. The new legislation, however, recognizes more definitely than even before that agriculture is a basic industry, one in which knowledge and skill alone are not sufficient for success, and that it is highly important that farmers obtain the capital they need on terms consistent with their credit.

That they have not always been able to do this was indicated by Pre-

sident Wilson in his message of 7 December 1915, advocating the provision of "adequate instrumentalities on which long credits can be obtained on land mortgages," and likewise in his speech on signing the Act, in which he said: "The farmers, it seems to me, have occupied hitherto a singular position of disadvantage. They have not had the same freedom to get credit on their real assets that others have had who were in manufacturing and commercial enterprises, and while they sustained our life they did not in the same degree with some others share in the benefits of that life". The creation by the Federal government of a distinctive rural credit system is thus a recognition of the needs of agriculture in this direction, and an indication of the belief that to render assistance in meeting these needs will be to discharge a function which will "promote the general welfare".

The history of the movement resulting in this legislation is interesting, partly from the fact that it is of such comparatively recent origin. It is one of many proofs of a new point of view and attitude towards the business of farming.

With the passing away of what may be termed the pioneer or formative period of American agriculture, towards the close of the nineteenth century, the need of an efficient system of financing agriculture began to be more and more realized. By this time free land had largely disappeared, and land values hadbegun to be more definite and stable. Farmers had come to appreciate the value of well-planned irrigation or drainage programmes, systems of clearing and improving land, more definite systems of road construction, proper building programmes, and better and more equipment on farms. The lack of funds in many districts with which to carry out these and other projects of obvious advantage emphasized and strengthened the demand for more adequate credit facilities.

According to the census of 1910, 33.6 per cent. of farms worked by their owners in the United States were mortgaged. The mortgages averaged $1,715 (1) each, or 17.3 per cent. of the value of the land and buildings of the farms mortgaged. The total amount of the mortgages on farms worked by their owners was slightly over 10 per cent. of the value of the land and buildings of all farms of this class. On this basis the aggregate farm mortgage indebtedness of the country has been estimated to be about $ 3,600,000,000. An inquiry instituted by the United States Department of Agriculture in 1913 indicated that of this amount about one fifth was supplied by banks, about one fifth by life insurance companies, and the remainder by mortgage companies and private individuals. A large part of this sum was lent for relatively short periods, usually from three to five years. Much variation in interest rates and commissions was found in the different parts of the country. The department reported a range in the percentage of the farm mortgage business on which commissions were paid from 1.3 per cent. of the total in Connecticut, to 91.6 per cent. in Oklahoma, and an average rate for interest and commission ranging from 5.3 per cent. in

(1) 1 dollar = about 4*s* 1 1/2*d* at par.

New Hampshire to 10.5 per cent. in New Mexico. In many individual cases the rates for interest and commission were far in excess of these figures.

In 1910, the American Bankers' Association appointed a committee to study the general subject of farm finance in this country. The report of the Secretary of Agriculture for 1912 contained the results of a questionnaire sent out to country bankers, farmers, and merchants as to the prevailing local conditions, while in the same year the collection of data as to European methods was undertaken by the State department and some of its findings submitted by President Taft to the House of Governors.

In April, 1912, a conference on co-operative credit was held at Nashville, Tennessee, under the auspices of the Southern Commercial Congress. This congress undertook to assemble a commission of representatives from each State to study co-operative systems in Europe. The commission was known as the American Commission, and consisted of sixty-seven members from twenty-nine States, the district of Columbia, and the dominion of Canada. Early in 1913 it was supplemented by the United States Commission of seven members, authorized by Congress to work in co-operation with it. A three months' study was made by the two commissions of agricultural credit and co-operation in fourteen countries of Europe, followed by elaborate reports and the submission of a proposed Land Credits Bill.

The first Federal legislation providing improved rural credit facilities was embodied in the Federal Reserve Act of 3 December 1913. This Act contained more liberal provisions than had previously obtained as to the discounting of agricultural short-time loans, and also empowered the national banking associations, under certain restrictions, to make loans on improved and unencumbered farm land. These real estate loans were, however, restricted to 50 per cent. of the value of the property and in duration to five years.

In March, 1915, the Senate and House each adopted a rural credits amendment to the Agricultural Apropriation Bill, but in conference both of these propositions were eliminated and a joint congressional committee provided to study the subject further and suggest legislation. This committee subsequently submitted a Bill which, after amendment, passed the Senate on 3 May and the House on 15 May 1916. After a considerable period in conference, the measure became a law on 17 July. It is evident, therefore, that the legislation is not hasty but that time has been taken for study of the question and the adaptation of a system to American conditions.

The complete title of the new measure is "An Act to provide capital for agricultural development, to create standard forms of investments based upon farm mortgage, to equalize rates of interest upon farm loans, to furnish a market for United States bonds, to create government depositories and financial agents for the United States, and for other purposes". This title indicates its general scope and comprehensiveness.

The Act provides for a Federal Farm Loan Board, a system of Federal Land Banks, National Farm Loan Associations, and Joint Stock Land Banks. Some of these component parts correspond to a certain extent to institutions which have proved successful in Europe and elsewhere, and some of

the principles incorporated are analogous to those followed in many of the building and loan associations developed in numerous urban districts of the United States. In form the measure is also patterned in a general way on the Federal Reserve Act, and while the system proposed is essentially distinct as to administrative purposes it is designed to supplement and cooperate with the Federal reserve system.

The Federal Farm Loan Board is given supervision over a Federal Farm Loan Bureau, to be established in the Treasury Department and to have charge of the execution of the Act. The board is to consist of the Secretary of the Treasury, *ex officio*, and four other members to be appointed for terms of two, four, six, and eight years, respectively, in the beginning, and thereafter of eight years each, at salaries of $ 10,0000 per annum. One of these members is to be known as the farm loan commissioner, and will be the active executive officer of the board. The board is to charter the Federal Land Banks, and has general supervision and control over the entire system. It is also to prepare publications relative to the Act, the principles of rural credit, and the like, and to disseminate its results, through the United States Department of Agriculture or otherwise.

The United States is to be divided by the board on a basis of State lines and the farm loan needs of the country into twelve land bank districts. Each district may contain a Federal Land Bank and branch offices as needed. A capital stock of $ 750,000, divided into shares of $ 5 each, is required for each of these banks, but it is provided that if this is not subscribed by the public within thirty days the government must purchase the unsubscribed portion of the stock. The funds thus secured, together with $ 100,000 specially appropriated to the expenses of the Farm Loan Board, are expected to be available to initiate the new system.

The National Farm Loan Associations, which are distinctive local organizations, are to be chartered by the Federal Farm Loan Board upon the recommendation of the district land bank. Membership in these associations is restricted to actual or prospective owners of farms in a given locality who wish to borrow upon farm mortgage security. At least ten such persons are required and their individual borrowings must not be less than $ 100 nor more than $ 10,000 and must aggregate at least $ 20,000.

The loans when granted are made by the district land bank to the individual members of the association through its secretary-treasurer. The amount can not exceed 50 per cent. of the value of the land, based principally on its earning power, plus 20 per cent of the value of the permanent insuredi mprovements. The loan can be negotiated only for the purpose of purchasing land for agricultural uses, the purchase of equipment, fertilizers, and live stock necessary for the farm operations, the provision of buildings or the improvement of farm lands or the liquidation of existing indebtedness.

Loans are to be made upon first mortgage security, for periods of from five to forty years, with interest not to exceed 6 per cent., and with payments on the amortization plan. This provision is intended not only to enable the farmer to secure loans conveniently and at rates he can afford

but to protect him in these loans from the necessity of heavy costs, bonuses, and commissions, and to extend the period of payment over a long period of years without the necessity of uncertain and costly renewals at stated periods. At the same time, opportunity is given for payments, in addition to those required, on instalment dates after the expiry of five years, thereby encouraging thrift and allowing the borrower to profit by favourable conditions.

In order to obtain funds to make the loans, the Federal Land Banks, upon the approval of the Farm Loan Board, are empowered to issue farm loan bonds based upon the mortgages obtained through the Farm Loan Associations. These bonds may be issued in denominations ranging from $ 25 to $ 1,000 and in series of at least $ 50,000, and are to bear interest payable semi-annually at a rate not to exceed 5 per cent. per annum.

The Farm Loan Associations are essentially mutual and co-operative, each member being required to subscribe for stock to the extent of 5 per cent. of his loan. This stock is held by the associations as collateral security until the payment of the loan, at which time it is withdrawn at par. In the meantime the borrower has received his proportionate share of any dividends from the operations of the association. A similar arrangement is also required between the associations and the Federal Land Banks.

Shareholders in the associations are held individually responsible, equally and ratably, but not for one another, for the liabilities of the association to the extent of the par value of their stock, plus the amount paid in and represented by their shares. It is, therefore, a plan for limited liability of members as contrasted with the assumption of unlimited liability, which constitutes an essential feature of a number of the European systems.

Inasmuch as inability to organize Farm Loan Associations might bring hardship upon individual borrowers, provision is also made whereby, after the Act has been in effect a year, the Federal Land Banks may make loans through other channels. If no Farm Loan Association has been, or is likely to be, formed in a locality, the Land Bank may employ an incorporated bank, a trust company, a savings institution, or a mortgage company as its agent in arranging the loans and in collecting payments. The agent must endorse all loans negotiated and may receive actual expenses and a commission not to exceed 0.5 per cent. per annum. The borrower in these cases subscribes for stock in the Land Bank itself and receives dividends accordingly.

Another alternative is provided in the Joint Stock Land Banks. These banks are to possess some powers similar to those of the Federal Land Banks, but differ from them in a number of ways. They must have a subscribed capital of at least $ 250,000, none of which comes from government funds. These banks are allowed to make loans on first mortgages on farm lands, and to issue a distinctive series of farm loan bonds to an amount not exceeding fifteen times their capital and surplus. Their interest rate cannot exceed by more than one per cent. the rate charged on their land bonds, or a total of 6 per cent., and any commission collected must have the approval of the farm loan board. In making the loans the Joint Stock Land

Banks, however, need not restrict the purposes for which the loans are to be used or the amount to an individual, or require the borrower to be personally engaged in the cultivation of the land mortgaged. The banks are also non-co-operative, no stock subscriptions being required of borrowers and any profits being apportioned among the shareholders alone.

The mortgages received and the bonds issued under the authority of the Act, whether by the Federal Land Banks or the Joint Stock Banks, are specifically exempted from Federal, State, and local taxation. The bonds are also made legal investments for all fiduciary and trust funds, and may be bought and sold by member banks of the Federal reserve system. It is expected that, because of these advantages and their standardized character, these securities will prove attractive investments and thus provide the bulk of the funds to be lent under the system.

The new Act is a response to a widespread demand arising from what is believed to be a necessity, and is a logical step toward better agriculture and better farming conditions. Operations under its provisions will therefore be awaited with keen and widespread interest.

ITALY.

THE ACTIVITY OF THE INSTITUTIONS OF LAND CREDIT IN 1915.

SOURCES:

ISTITUTO ITALIANO DI CREDITO FONDIARIO IN ROMA. Assemblea generale ordinaria degli azionisti del 26 febbraio 1916. Relazioni del Consiglio di Amministrazione e dei Sindaci sull'esercizio 1915 (*Italian Institute of Land Credit in Rome. Ordinary General Assembly of the Shareholders on 26 February* 1916. *Reports of the Council of Administration and the Commissionaries for Accounts on the year* 1915). Rome, G. Bolognesi, 1916.

CREDITO FONDIARIO DELLA CASSA DI RISPARMIO DELLE PROVINCE LOMBARDE IN MILANO. Bilancio consuntivo dell'anno 1915. Anno XLVIII d'esercizio (*Land Credit of the Savings Bank of the Lombard Provinces in Milan. Balance-sheet for* 1915. 48th *year*). Milan, E. Reggiani, 1916.

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CREDITO FONDIARIO DELLA CASSA DI RISPARMIO IN BOLOGNA. Atti della assemblea generale degli azionisti tenutasi il giorno 26 marzo 1916 e resoconto del 1915 (*Land Credit of the Savings Bank of Bologna. Proceedings of the General Assembly of Shareholders held on 26 March* 1916 *and Financial Statement for* 1915). Bologna, Merlani, 1916.

ISTITUTO DELLE OPERE PIE DI S. PAOLO IN TORINO. Relazione sul conto consuntivo del credito fondiario per l'esercizio 1915 (*Institution of the Charitable Works of Saint Paul in Turin. Report on the Land Credit Accounts for* 1915). Turin, Società tipografico-editrice nazionale, 1916.

REPORTS OF OTHER INSTITUTONS OF LAND CREDIT OPERATING WITHIN THE KINGDOM.

According to our custom we will review the activity of institutions of land credit in Italy in 1915. In this year they had to fight against serious difficulties, due especially to the limitations on the placing of titles to lands and the control of the means employed for the concession of new loans (1). These were however difficulties which did not prevent the beneficent action of the institutions, as is shown by the facts concerning them which we will give.

(1) See the article by G. POLETTI, "Gli istituti di credito fondiario durante il 1915", in *Rivista di scienza bancaria*, Rome, Part 5, May 1916.

§ 1. The Istituto Italiano di Credito Fondiario.

In 1915 the requests for loans which this institution accepted for examination numbered seventy-one and were for 5,992,000 liras (1), as against 259 for 29,051,000 liras in 1914. It is superfluous to state that this great decrease is due to the state of war and the consequent restraint of credit operations, as also to the measures of precaution which the institution thought well to adopt as regarded the acceptance of new requests for loans.

The requests still under discussion on 31 December 1914 numbered 394 and were for 38,526,000 liras. If to these be added those tendered in 1915, it is seen that the number dealt with in the year was 465 and their amount 44,518,000 liras. The abandoned requests — those not accepted or not complied with definitely in 1915 — numbered 197 and were for 23,845,000 liras. Thus on 31 December last there were in course of examination 268 requests for a total amount of 20,673,000 liras. In 1915 the total number of approved loans was fifty-two, and their amount was 5,241,500 liras, instead of the 7,309,000 liras asked for by the borrowers.

The number of stipulated loans was seventy-four and their amount 6,389,500 liras, namely seventy loans in specie for 5,003,500 liras and four in the form of titles to land for 1,386,000 liras. Of these loans forty-one for 3,520,000 liras were given on the security of rural landed property, especially in Apulia (eleven loans for 1,067,000 liras), in Sicily (eight for 392,500 liras) and in Venetia (three for 1,070,000 liras). Thirty-three others for 2,869,500 liras were granted on the security of urban landed property.

The titles to land which were in circulation on 31 December 1915 numbered 326,310 and were for a total amount of 163,155,000 liras.

Since in 1915 twenty-five years had passed since this institution began its activities we think it opportune briefly to review its work and the results of its work in this period.

First it should be noted that the stipulated loans from 1891 to 1915, inclusively, numbered 3,401 and were for a total sum of 276,500,000 liras, giving an average of 136 loans amounting to more than eleven million liras a year.

Of the stipulated loans 3,384 amounting to about 270 million liras were in specie and seventeen amounting to 6,500,000 liras in titles to land.

The loans hitherto converted to a lower rate of interest by this institution amount to 17,580,960 liras: those converted from 4 ½ to 4 per cent. amounting to 2,692,101 liras, those from 4 ½ to 3 ½ per cent. to 10,052,374 liras, and those from 4 to 3 ½ per cent. to 4,836,484 liras.

Of the total amount of the stipulated loans the borrowers have repaid 92.4 million liras, so that mortgage credit is now being given for 184,204,760 liras. If to this be added a balance, at the aforementioned date, of

(1) 1.2611 liras = 1*s* at par.

10,000,000 liras, made over by the land credit of the old *Banca nazionale*, the number of the loans was actually 2840 and their amount 186,092,098 liras on 31 December last. Of the amount of the loans stipulated hitherto 130,500,000 liras, that is 47 per cent. of their total amount, was used to extinguish burdensome mortgage debts and to get rid of dues and other charges on real estate.

The mortgage liabilities extinguished by these loans were distributed as follows, as regards the rate of interest with which they were charged: from 4 to 8 per cent., 114,881,677 liras; from 8 ½ to 10 per cent., 1,342,558 liras; higher and indeterminate rates of interest, 11,606,445 liras — in all 127,830,680 liras.

The sums used, as has been said, to get rid of dues and estinguish mortgage debts were from 1891 to 1915 distributed according to districts as follows: in Northern Italy 7,286,955 liras; in Central Italy 45,342,643 liras; in Southern Italy including the islands, 78,012,407 liras — in all 130,642,005 liras.

The half-yearly recoveries of debts have always, thanks to vigilant service, given satisfactory results. The yearly deficits, grouped in periods of five years, give average percentages which cannot be considered high in relation to the sums to be recovered. It is enough to note that in the last period of five years reviewed the annual average of the deficits was 11.14 per cent., giving indeed an increase on the preceding quinquennial periods but one which was caused by several years of bad harvests and above all by the war.

In the twenty-five years which have passed since 1891 it has been necessary for the total number of 3,401 stipulated loans, amounting to 276,500,000 liras, to have recourse to only 113 evictions which concerned loans for the nominal amount of 9,476,300 liras secured by real estate having a security value of 19,200,000 liras. At the time of the auctions for these 113 loans the credit of the institution amounted to 8,837,457 liras and the prices realized reached a total of 16,606,913 liras.

The loss incurred by the institution by several of these evictions and their costs were only 160,000 liras, that is 1.80 per cent. of its credit.

The titles issued were of three types — 4.50, 4 and 3.50 per cent. —: they numbered in the twenty-five years 494,000 and had a nominal value of 247 million liras.

At the same time the titles bearing the three different rates of interest which were circulated numbered 459,445 and their nominal amount was 229,722,500 liras. Of this number 13,777 for 6,888,500 liras were granted in payment of stipulated loans in the form of titles and 445,668 for 222,834,000 liras were sold by the institution.

To resume — the general movement of titles to land bearing interest at 4.50 and 3.50 per cent. from 1891 to 1915 was as follows:

	Number	Nominal value in Liras
Titles created	494,000	247,000,000
Titles drawn	143,849	71,924,500
Titles in circulation on 1 January 1916	326,310	163,155,000
Titles issued but not placed on 1 January 1916.	23,841	11,920,500
	494,000	247,000,000

The development of the operations is reflected especially in the balance-sheet which has had a parallel and sure and constant progress.

Distributed in periods of five years the receipts, expenditure and profits show the following average annual results for each period:

Period of 5 years	Average Receipts (thousands of liras)	Average Expenditure (thousands of liras)	Average Net Profits (thousands of liras)
1891-1895	1,932	448	1,484
1896-1900	3,832	1,886	1,946
1901-1905	5,151	3,071	2,080
1906-1910	6,309	4,253	2,056
1911-1915	8,453	6,233	2,220

The formation of reserve funds during the twenty-five years for which this institution has existed and the dividends paid to shareholders are shown by the following figures:

Period of 5 years	Total Amount of Reserve Funds liras	Average Yearly Dividendes liras
1891-1895	1,097,579.31	17.30
1896-1900	3,014,498.65	22.90
1901-1905	4,340,617.48	24.00
1906-1910	6,185,224.61	23.20
1911-1915	7,458,259.84	23.80

Such are briefly the results of the work of the *Istituto italiano di credito fondiario* during its twenty-five years of activity.

§ 2. The land credit of the savings banks of Milan, Bologna and Verona.

During 1915 the *Credito fondiario della cassa di risparmio delle provincie lombarde* has received 427 requests for loans for a total amount of 34,062,000 liras, and these, added to the requests which were in course of examination

at the beginning of the year, namely 1,057 requests for loans amounting to 89,329,000 liras, formed a total number of 1,484 requests for the total sum of 123,391,000 liras. The stipulated loans numbered 188 and amounted to 10,900,000 liras, while in the preceding year their number had been 274 and their amount 19,651,000 liras. Fifty loans for the sum of 2,691,500 liras were granted on the security of rural property, 133 for 7,994,000 liras on that of urban property, and five for 214,500 liras on that of mixed urban and rural property.

Among the provinces which have had most recourse to credit, offering rural landed property as security, are to be noted that of Rome which obtained two loans for 440,000 liras, Brescia which had one loan of 253,000 liras, Ravenna which had four for 214,000 liras, and Parma which had four for 200,000 liras.

More than half the loans were of sums between 1,000 and 50,000 liras and were granted for the term of forty years.

On 31 December 1915 the titles in circulation numbered 416,538 and their amount was 208,269,000 liras. Existing loans numbered 4,221 and their amount was 206,222,250 liras. The year closed with a net profit of 716,305.94 liras.

If we pass to the *Credito fondiario della cassa di risparmio di Bologna* we find that in this year ninety-three loans for a total amount of 3,552,500 liras were stipulated. Of them sixty-one for 1,668,500 liras were secured by urban property, twenty-eight for 1,216,000 liras by rural landed property, and four for 668,000 liras by mixed urban and rural property. Further the individual amounts of eleven loans were between 500 and 5,000 liras, those of ten between 5,000 and 10,000 liras, those of thirty-three between 10,000 and 20,000 liras, those of ten between 20,000 and 30,000 liras, etc. The province which had most recourse to credit was that of Bologna which obtained seventy-seven loans amounting to 2,216,500 liras.

From the time this institution was founded in 1868 until the end of 1915, 3,383 loans for a total sum of 130,806,000 liras were stipulated, each loan thus averaging 38,665 liras.

Finally the *Credito fondiario della cassa di risparmio di Verona* granted in 1915 twenty-four loans for a total sum of 626,000 liras.

§ 3. The land credit of the charitable works of St. Paul in Turin, of the Monte dei Paschi of Sienna and the Sardinian land credit of Cagliari.

The transactions which the land credit of the *Istituto delle opere pie di S. Paolo in Torino* concluded in 1915 were less numerous but more important than those of 1914, a year of which the converse proposition was true. For while in 1914, 204 loans for 7,006,500 liras were granted, in 1915 there were granted 160 for 7,628,000 liras, that is loans fewer in number by fourty-four but greater in amount by 621,500 liras.

The nature of the land mortgaged was as follows :

Year	Urban Property		Rural Property		Mixed Property		Total	
	No. of Loans	Amount (liras)	No. of Loans	Amount (liras)	No. of Loans	Amount (liras)	No. of Loans	Amount (liras)
1914	184	4,833,000	16	1,890,500	4	283,000	204	7,006,500
1915	136	6,495,000	15	702,500	9	430,500	160	7,628,000
Differences between 1914 and 1915 . .	— 48	+ 1,662,000	— 1	— 1,188,000	+ 5	+ 147,500	— 44	+ 621,500

As regards the destination of the borrowed capital it appears that 2,658,383 liras was employed by the debtors to extinguish their more burdensome liabilities to individuals, while 50,428 liras was used to pay the balance of loans on land obtained from this same institution.

The greater number of the loans stipulated during the year are to be ascribed to the provinces of Genoa (fifty-two for 874,000 liras), Turin (thirty-nine for 982,000 liras), Milan (twenty for 1,622,000 liras) and Rome (fourteen for 2,088,000 liras).

The loans granted as has been stated are distributed according to their amounts as follows.

	Number	Amount (liras)
Loans up to 10,000 liras in amount	59	387,500
» from 10,500 to 20,000 » » »	34	541,500
» » 20,500 » 100,000 » » »	48	2,646,000
» » 100,500 » 500,000 » » »	18	3,503,000
» » 500,500 » 1,000,000 » » »	1	550,000
	160	7,628,000

The greater number of stipulated loan contracts were for a term of from forty-six to fifty years. These numbered 119 and their amount was 6,604,500 liras.

Turning to the land credit of the *Monte dei Paschi* of Sienna we find that in 1915 this institution accorded eighty-nine loans amounting to 2,376,500 liras, forty-three of them for 1,438,500 liras being on rural property, forty-three for 885,000 liras on urban property, and three for 53,000 liras on mixed urban and rural property.

The greatest number of loans were obtained by the province of Pisa, namely twelve for 240,000 liras. Next come the provinces of Florence with eleven loans for 233,000 liras, of Perugia with eleven loans for 325,000 liras, and of Rome with eleven loans for 637,000 liras.

From its foundation in 1868 until the end of 1915 this institution granted 4,926 loans for the total sum of 156,520,000 liras.

Finally the *Credito fondiario sardo* of Cagliari has during the year under review stipulated thirteeen mortgage loans for the sum of 502,000 liras.

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The seven enumerated institutions of land credit which operate in Italy have thus granted, during 1915, 641 mortgage loans for a total sum of 31,974,500 liras, as against 49,583,000 liras in 1914, 62,846,500 liras in 1913, 76,249,750 liras in 1912, and 78,896,000 liras in 1911.

MISCELLANEOUS INFORMATION RELATING TO CREDIT IN VARIOUS COUNTRIES.

GERMANY.

MORTGAGE BANKS IN THE FIRST HALF OF 1916. — *Der Deutsche Oekonomist*, Berlin, 12 August 1916.

The period of stagnation continued for mortgage banks during the first half of 1916. The resumption of business noted here and there in the building department concerned for the most part public works; and activity on the part of private individuals remained almost completely nil. Thus mortgage banks were occupied almost exclusively by the conduct of business previously undertaken. Fresh loans were very rare; and redemptions of mortgages which fell due occurred only exceptionally. The circulation of bonds entirely ceased as a consequence of the issue of the five per cent. war loans, except in the case of a few establishments in South Germany which have been able to report an increase in the number of bonds they circulated.

An examination embracing thirty-eight German mortgage banks allows the statement that the amount of registered mortgages (*Register-hypotheken*) was continuously reduced during the first half of 1916 from 11,548.67 million marks (1) to 11,520.30 million. Only a few establishments succeeded in obtaining an increase in the amount of their mortgages, and that one which was very slight. At the same time the sum covered by the circulated bonds fell from 11,147.12 million marks at the end of 1915 to 11,136.67 million on 30 June 1916. On the other hand loans to local administrative bodies and the bonds they circulated increased in value from 526.56 million marks to 539.05 million, and from 496.66 million to 505.58 million resectively. For this increase the society of Alsace-Lorraine for Land and Communal Credit is almost solely responsible, for it reports, under the respective heads named, increases from 16.04 to 25.65 million marks, and from 14.66 to 24.08 million marks, a circumstance which seems to be due to the very special conditions reigning in Alsace-Lorraine.

(1) Mark = about 1 *s* at par.

COSTA RICA.

MORTGAGE CREDIT IN COSTA RICA. — *La Gaceta, Diario Oficial*, Nos. 128, 139, 1st half-year, and 37, 2nd half-year, 6 June, 18 June and 12 August 1916.

Twice before this year the congress of Costa Rica has discussed the question of mortgage credit, a question forced by its obvious urgency on the attention of the public authorities. The first scheme for legislation, proposed in 1912 by Mr. Alfredo González, now president of the republic, involved among other measures the placing in foreign countries of the bonds of a National Mortgage Bank, but it was not approved. The second scheme, which was drawn up by the financial secretariat and submitted to the congress in 1914, was no more fortunate. A third scheme however, which aims at forming a mortgage department attached to the International Bank of Costa Rica, was voted this year and promulgated on the 16th of last June.

As is remarked in the official explanation of the grounds for this law, the organization on which its provisions are based is in no way new. For a shorter or longer period there have been mortgage establishments in the chief countries of South America — Chile, the Argentine and Brazil. The Chilian Bank for Mortage Credit, founded in 1855, which has had excellent results, forms a notable and valuable precedent, and one most instructive as regards the administration of an enterprise of its kind. Therefore in drawing up the scheme, which has now become law, all the lessons of experience could be taken into account, and the dangers inherent in half digested projects, not followed up to their conclusions, could be avoided.

Article 1 defines the object of the mortgage department, that of giving facilities for obtaining long term loans on mortgages, and repaying them by means of annual payments which shall include both interest and redemption. The activities of the department consist in: 1) the issue of bonds or mortgage bonds and their allocation, on the security of property mortgaged to the department; 2) the reception of the annual payments made by mortgagers to the bank; 3) the payment of the interest due to the respective holders of bonds; and 4) the redemption at par of mortgage bonds up to the amount at the disposal of the redemption fund. These bonds will be issued in series and each will bear the same rate of interest and redemption quota. They may be made payable either in national or in foreign money, according to whether they are destined for the interior or for foreign lands. They are payable to holder or to bearer, transferable or negotiable. Bills payable to holder become transferable if they be endorsed.

Persons taking mortgage bonds will undertake, according to Article 4, to make to the bank, until the amount of the bonds has been covered and for the number of years fixed by the contract, annual payments which

will comprise : 1) interest *which may not exceed 8 per cent. a year ;* 2) the redemption quota *which may not be less than one per cent. ;* 3) the quota destined for the reserve fund and for covering the costs of administration *which may not exceed one half per cent.* The annual payments will be payable in advance in two half-yearly instalments. Unpunctuality in making them will entail the payment of interest for the period of retardment at the rate of two per cent. a month.

The bank cannot issue bonds for a larger sum than the value of the mortgages it holds. Therefore every mortgage bond issued must be entered in an especial register which will be kept at the Registration Office of Mortgages. Entries will be made in this register on inspection of the titles to mortgages held by the bank. Besides its ordinary redeeming of bonds up to the value of the fund destined for this purpose, the bank will have the right to redeem at par bonds for which lots will be drawn, up to a number fixed by the management.

Debts incurred to the bank must be secured by a first mortgage on rural real estate. The loan which the bank grants in the form of mortgage bonds must not exceed half the value of the real estate which is its security. The value of the mortgaged real estate must in no case be less than 500 colons nor the loan less than 250 colons (1).

" The executive ", says the official explanation, " does not contemplate the possibility of burdening with mortgages the rural property of the country which hitherto has been relatively unencumbered. Nor does it wish to give false liquidity to property in real estate.... Its aim is merely to satisfy legitimate needs, to place available resources at the disposal of production — not to encourage, by artificial methods, perilous or dangerous enterprise or unhealthy speculation. We do not desire to raise the market value of land, by providing means to buy it, but to increase its productivity. To make a land merchant of the peasant or the landowner is the greatest of possible mistakes, and the formation of a mortgage bank which afforded credit too easily and too widely would be a work of doubtful advantage... " And in this connection Article 7 of the law contains a very wise regulation. Its exact words are as follows, " In general the management ought before granting a loan to ascertain above all that the mortgaged real estate offers a guarantee, in virtue not only of its value but also of its constant and regular production, that its owner can make without difficulty the yearly or half-yearly payments due. Uncultivated lands which in their existing condition produce nothing, and which will not lend themselves to normal cultivation without extraordinary preliminary expenditure, cannot therefore be accepted as security ".

The valuation of real estate will be made by one or two experts, nominated by the bank. In making the valuation the absolute value of the soil will first be taken into account and then that of the improvements, buildings and crops ; and the following restrictions will be observed :

(1) Colon = abt. 1s 11*d*.

a) buildings of a provisional description will be left out of account, and permanent buildings will be taken to have only their actual market value, which must in no case surpass two thirds of their original cost ; *b*) fixed installations of machinery which form an integral part of the real estate will be taken into account only in the cases permitted by law, will be held to have a value not greater than half their original cost, and will be the subject of an especial specification in the mortgage contract ; *c*) improvements — such as drain ditches, a water supply etc. — will not be considered as having individual value but merely as affecting the value of the whole real estate ; *d*) perennial crops —such as coffee, cocoa and tree fruit — will be valued with caution, having regard to the age of a plantation and its possible depreciation during the term of the loan, and the mortgage contract will oblige the debtor to keep his plantations in a good state, and not to abandon them or essentialy modify them without the bank's consent ; *e*) shorter lived perennial crops — such as sugar cane, bananas and permanent pasture — will not be taken into account but the ground they occupy will be valued as unplanted agricultural land.

As regards buildings which are integrally part of real estate, in order that they may be taken into account in calculating the limit of a loan they must be insured against fire for the sum at which they are valued.

By the terms of Article 17 of the law contracts mortgaging lands to the bank are exempt from the stamp duty.

Finally, since the mere issue of bonds would be devoid of practical value unless from the first they could be converted into specie, and since small farmers, living in the country and entirely ignorant of operations of the sort, must be the first to be given the opportunity of thus converting them, Article 25 authorizes the International Bank to devote a sum of 500,000 colons to the purchase of mortgage bonds exclusively from genuine farmers whose means are small. Such purchase is further not legal unless the bonds represent a loan of no more than 2,500 colons and unless the debtor or debtors undertake to live on the mortgaged property. The bank may not buy from one person, either directly or undirectly, bonds representing loans of which the amount surpasses 2,500 colons, nor issue fresh bonds to a person from whom it has bought bonds of this fixed value, even if he be ready, in return for the fresh bonds, to mortgage more real estate.

Applications for loans may be addressed either directly to the management of the bank or tot he Commissions for Agricultural Credit formed by the law of 30 December 1914. The commission of the district in which the property to be mortgaged lies has competence. If the application be sent to this commission it is examined and then, with advice for which reasons are given, is transmitted to the bank, which decides whether or not the loan shall be granted.

Such are the most important aspects of the new law voted by the congress of Costa Rica. The scheme adopted has the merit that it seeks to find necessary capital within the country, while it leaves the mortgager free individually to obtain abroad what support he can. It aims at keeping

within fit limits the indebtedness of rural property in that it provides against speculation in land. It is advantageous to small farmers in that it gives them facilities for placing their bonds. And finally, since the mortgage department depends on the International Bank, the costs of administration are reduced to the minimum.

ITALY.

1. TO PROVIDE EASIER CREDIT TO THE AGRICULTURAL CO-OPERATIVE SOCIETIES. — *Gazzetta Ufficiale del Regno d'Italia*, N°. 246, Rome, 19 October 1916.

A tendency is apparent to day among co-operative societies to devote themselves to agricultural enterprise — to take lands on lease in order to cultivate and imrprove them, by means of the action of their members and in the interests of these. In order to encourage this tendency the Minister of Agriculture, Mr. Raineri, has issued a decree (N° 1336, 8 October 1916) which is intended to enable agricultural associations to procure for themselves, by means of credit, the working capital which they need.

The chief obstacle in the way of the granting by credit institutions of advances, to the extent to which they are required by agricultural associations, is the slightness of the security offered by a lessee in the form of a preferential claim on products, food and forage supply, and live and other stock, as this preference is now regulated by Part. I of the law of 23 January 1887, Number 4276. The provisions of the new decree therefore aim at converting the preference into a real security — a necessary preliminary to a development along these lines of agricultural credit in a measure proportionate to the importance of the new co-operative movement.

The nature of the preference has been modified in various ways. In the first place it has been enlarged to include standing crops ; and secondly the owner's preference, since it competes with the agricultural preference, has had its term reduced to two years. The fundamental alteration consists however in a prohibition to deliver any goods subject to the preference to the buyer, in the case of their sale, until the debt incurred to the credit institution has been discharged.

If this prohibition be not respected the debtor who makes the sales shall be held to have committed a criminal offence and the creditor may proceed against him.

On the other hand the buyer is in a position easily to become aware of the existence of the preference ; since the obligation to enter it in the register of the Keeper of Mortgages has been replaced by the obligation to deposit a copy of the loan contract, creating the preference, in the communal clerk's office, and since extracts of this contract are to be posted up with the other communal notices.

In addition to these provisions as to the preference the new decree

provides especial financial facilities for making loans to agricultural associations, and establishes that on contracts for such loans a registration fee will be payable at the rate of 12 centimes for every 100 liras (1) of capital borrowed, that is at the same rate as that fixed for the granting of credit by co-operative societies of production and labour.

Not only agricultural societies becoming responsible for collective farms but also agricultural universities will be able to take advantage of these provisions. In this connection the new decree has its complement in that of 29 August, which has rendered possible the extension of the domains of the agricultural universities.

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2. THE GROWTH OF THE BANK OF AGRICULTURAL CREDIT IN TUSCANY. — *L'Agricoltura Toscana*, Nos. 17 and 18, Florence, 15-20 September 1916.

This bank was founded in Florence in October 1913. It was intended that it should serve to advance capital to its members in order to provide their farms with live and other stock ; in order to enable their purchase of agricultural machines and implements, and of seeds, manures, anti-cryptogamous substances and everything else which might be useful to the pursuit of agriculture ; in order to give them credit on the security of their standing crops and of the products of their lands existing in their stores and cellars ; and in order to discount the bills issued to them, on account or in payment for their produce.

This bank met needs existing in Tuscany and therefore its growth was rapid. On 31 August 1916 it had 406 members and a capital of 85,300 liras ; and had granted loans to farmers amounting to 1,748,310.99 liras.

In the period of war only, from May 1915 to August 1916, the bank made advances of which the total was 1,291,176.79 liras : namely to large landowners 317,302 liras ; to owners of medium-sized and small holdings 631,341 liras ; to leaseholders and *métayers* 143,540 liras ; to managers 25,345 liras ; to agricultural tradesmen and manufacturers 3,148.75 liras ; and to agricultural associations 170,500 liras.

UNITED-STATES.

1. CATTLE LOANS IN THE UNITED-STATES. — *How Cattle Production is encouraged by the Co-operation of the Banks*, by E. A. Weir. *The Grain Growers' Guide*, Winnipeg, 12 July 1916.

Loans on live stock constitute in certain parts of the United States a well developed form of agricultural credit of which the organization deserves notice.

These loans are granted almost exclusively on cattle, both on breeding

(1) 1. 2611 liras = 1s at par.

stock and on animals raised for beef. They are of two kinds, those on breeding and those on feeding stock. On the former loans are usually made through the small local banks scattered all over the country ; on the latter either through the local banks, or through large central banks or the cattle loan companies dependent on these, and especially organized by them at the large live stock market centres, for the purpose of encouraging by loans the farming of live stock.

The growth of these companies has several causes. In the first place American banks cannot through ordinary channels circulate enough money in the country. Secondly the National Bank Act forbids more than 10 per cent. of the total of the capital, surplus and undivided profits of a bank to be lent directly to one individual, firm or corporation ; whereas there is no restriction on the amount of capital a cattle loan company may place. A company provides a useful outlet for the surplus not only of the bank on which it depends but also of other banks. Thirdly in many States the law limits the rate of interest which a bank may charge : in some this may not surpass 7 per cent. ; in others, less densely settled, 10 per cent. But cattle loan companies are subject to no such restriction, and they themselves can therefore borrow at the prescribed rates for the purpose of making loans.

For all these reasons there came into being, with the organization of stock yard companies, the concentration of marketing facilities and centralizing of the packing industry, and the increased demand for meat and for farmers' credit, a number of banks known as « live stock banks ».

Loans on cattle are no new thing. Their development has been parallel with that of all the territory of the United States west of the Mississipi River. In very early days their volume was small and they were most naturally made by the local bankers.

Applications for loans are made by letter, through local commission men or through the local bank, by means of elaborate application forms ; and all the details given on these forms by applicants are carefully verified by the local bank, the commission man, the registrar of deeds or county clerk, or the representatives of the loan companies. If the report on the applicant be favourable the desired loan is made on a note payable at six months, secured by a chattel mortgage on the cattle bought with the loan or on the borrower's other live stock, his horses being sometimes included.

Practically all loans are made to landowners. Their essential condition is that the borrowers be personally honest and be experienced and able cattle farmers. Loans are even made on stock already mortgaged, the first mortgage being in this case taken over by the loan company. The original notes are renewable at the expiry of the first six months up to a period of eighteen months. The rate of interest charged is about 8 per cent. or sometimes more, and the paper is made over to the purchasing bank at from 4 ½ to 5 ½ or even 6 per cent. thus allowing a margin of at least 2 per cent. These operations make such excellent returns that failure among the companies is unknown, and their losses are extremely small. One of the chief of them, the south St. Paul Loan Company, has lost only

1/30 per cent. Such prosperity is due to the companies' system of inspecting the stock of borrowers, thanks to which it is almost impossible for mortgaged cattle to be sold without the mortgagee company's knowledge.

The capital of the companies varies from a few thousand dollars to about a quarter of a million ; the sum of their loans from a few thousand to three million dollars. The Chicago Cattle Loan Company which is subsidiary to the Stock Yards National Bank has a nominal capital of $ 200,000 (1), of which $ 100,000 is paid up. In 1915 its loans amounted to $ 2,500,000. These figures disregard the loans made on cattle by the bank directly, of which the amount in 1915 approximated to $ 12,000,000. The working capital of the South St. Paul Cattle Loan Company is $ 375,000 ; and it has now more than $ 2,000,000 placed as loans, most of the loans being of sums between $ 1,000 and $ 5,000.

A reason for the stable value of the paper representing the loans made by the companies is that these have the strong financial backing of many of the large packing firms. The system of cattle loan companies is indeed blamed for giving the packers their tremendous command of the resources in live stock of the country and allowing then to regulate markets.

Loans of the second category, those on breeding stock, are made by small local banks and have rendered possible a considerable development of breeding in many parts of the country. The security has been found by these banks to be better than that afforded by grain. Repayments are made so regularly that money is sometimes advanced on a simple note of hand, without the security of a chattel mortgage. In Minnesota the rate of interest has been lowered from 10 per cent. to 7 or 8 per cent. The intensivity of these loan transactions appears from the fact that a small bank, capitalized at $ 10,000, has $ 175,000 placed in loans, of which the average individual amount is less than $ 300 and all of which have been made to men living within 15 or 20 miles of the bank. Most of these loans are made for 12 months but they can be renewed for an indefinite period.

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2. FARM MORTGAGE CREDIT IN NEW HAMPSHIRE. — SMITH (GUY C.) : *Arts and Science Research Bulletin of New Hampshire College*, No. 2. Durham (New Hampshire), January 1916.

A scientific investigation by the New Hampshire agricultural college has furnished information as to mortgages and farm credit in this State. The facts collected have in several cases been mere estimates, liable to correction, but taken together they give a sufficient knowledge of the subject.

The investigation was made by means of forms of questions which were

(1) dollar = about 4*s* 1 1/2 *d* at par.

sent to all the banks of the State and to many farmers scattered over its territory. Replies were received from more than 35 per cent. of the banks and more than 38 per cent. of the farms to which the enquiries were addressed. The resultant information was verified and amplified by interviews with bankers, farmers and others cognizant of the matter in hand.

The following are the principal points which emerged.

As regards *rate of interest* a law passed in 1911 exempted from taxation " money loaned at a rate of interest not exceeding 5 per cent. per annum secured by note and mortgage on real estate situate in this State ". The effect of this law has been to make the usual rate on farm mortgages 5 per cent. as against a previous rate of 6 per cent., the payment of the tax, which averages about 1 $^1/_2$ per cent., being thus avoided. The answers to the questions as to the rate of interest on mortgages were as follows :

Savings Banks and Building and Loan Associations exacted		. .	5 %
Farmers paid on loans from banks	— 88 % of them	. . . . .	5 %
" " " " " "	— 12 % " "	. . . . .	6 %
" " " " other sources	— 76 % " "	. . . . .	5 %
" " " " " "	— 24 % " "	. . . . .	6 %

Two national banks reported rates above 5 per cent. In general the rate for farmers was the same as that for other borrowers.

Other items of expense, such as that for drawing up and recording the mortgage and examining the title to the mortgaged property, were found to be nominal. The mortgagee rarely exacted a commission but interest was sometimes paid in advance.

The period for which loans are made on mortgages is indefinite. They are usually made for six months or a year and are renewable on payment of interest. Loans by savings banks are theoretically repayable on demand but if the security be good and the interest paid regularly the mortage is as a rule not foreclosed in practice unless the farm change hands or mortgaged woods be felled or sold.

Mortgage loans held by building and loan associations mature in about twelve years. Of the farmers interrogated 75 per cent. reported that their mortgages were payable on demand. 25 per cent. that they were payable in from one to six years.

The amount of the loan varies from 25 to 75 per cent. of the value of the mortgaged property. The average appears from the farmers' answers to be about 58 per cent. and this accords with information derived from other sources. By the Federal Reserve Act any national bank in New Hampshire may lend money on the security of improved farm real estate up to 50 per cent. of its value ; and the amount of the bank's deposits which may be so lent is also limited by the law. But loans of this class are not well adapted to the business of purely commercial banks. The State law governing savings banks provided however that these may lend on real estate as much as 70 per cent. of its value ; and with Buildings and Loan Associations they are the principal *source of mortgage credit.*

The investigation has attempted to discover the proportion in which banks and individuals share the position of mortgagees. According to the replies received from banks they hold 84 per cent. of the mortgage loans, according to the farmers' replies 61 per cent. The truth lies probably between these two figures and may be estimated as 75 per cent. This figure is also reached by another method. The United States census for 1910 reports the amount of mortgage indebtedness of New Hampshire farms worked by their owners as $4,773,610, a sum which does not include the indebtedness of 568 other farms partly made up of rented land, nor that of farms worked by tenants. If we admit that the average indebtedness of a farm is the same in the two latter groups as in the first, namely $842, we must add about $500,000 to the debts secured by mortgage, giving a total for this State of $5,250,000, a figure probably short of the truth. We may compare with it a statement in the last annual report of the New Hamphsire bank commissioners that the New Hampshire banks have lent about $4,000,000 on farm real estate. The proportion of mortgage loans held by the banks is thus again found to be 75 per cent.

The life insurance companies seem to make no investments in real estate in New Hampshire. In some cases they have made various attempts to do so, but the competition and the large sums supplied by local institutions and individuals have prevented their success.

The enquiry has shown that farmers find no difficulty in borrowing on mortgages, at advantageous rates of interest and for long terms, in New Hampshire. The practice of rendering mortgages payable on demand, which makes their term indefinite, places the borrower in theory too much at the mercy of the mortgagee, but actually it has been found to be satisfactory.

NOTICES OF SOME RECENT PUBLICATIONS RELATING TO CREDIT.

GERMAMY.

GOELDEL (Dr. Herbert) Verschuldung und Entschuldung des grösseren Grundbesitzes in Westpreussen (Indebtedness and Deliverance from Debt of Large Properties in West Prussia). Berlin, Stuttgart, Leipzig, W. Kohlhammer, 1915, 133 pages.

This book has two parts : the first is concerned with the indebtedness of landed property, the second with its deliverance from debt.

In this Review articles have already been published in which an endeavour has been made to throw all possible light on this subject (1).

Dr. Goeldel's book contains little which the articles, indicated below in a footnote, left out of account. It is rather a collection of facts bearing only on Western Prussia.

As regards the present condition of the indebtedness of landed property the facts given in this book are based on statistical notes showing the rural debt of Prussia and dating from 1883, 1896 and 1902.

The statistics of 1902, which are the most recent, show that the average indebtedness of all rural landowners in Western Prussia amounts to 52.8 per cent. of the total wealth, that is the greatest percentage of the whole kingdom. This percentage varies from a minimum of 35.7 per cent. in the case of landowners deriving from the land a taxable income between 60 and 90 marks, to a maximum of 63.1 per cent. for large landowners whose net income is between 1,500 and 3,000 marks. The group of very large landowners whose revenue exceeds 3,000 marks has an average indebtedness only slightly less than 54 per cent. The trustees contribute to the amelioration of the situation for they have few debts and belong almost entirely to the last-named group.

The statistics of 1902 as to the indebtedness of the land may be said to have been made out at the end of a long economic crisis in agriculture.

(1) See *Bulletin of Economic and Social Intelligence*, September 1910, June 1911 and November and December 1911 ; also February 1914, page 51 : " Recent Development of the Co-operative Institutes of Land Credit for Rural Holdings " ; August and November 1915, pages 83 and 57 ; "Measures taken or proposed by the Prussian Landschaften for the Extension of their Mortgage Credit to Peasant Holdings " ; November 1913, page 65 : "Work of the East Prussian Landschaft from 1788 to 1913 ".

In the period from 1890 to 1900 the net agricultural income diminished markedly. The price of agricultural products was so low that the rate of interest on capital invested in agriculture was much reduced. It is precisely on this period that the statistics of 1902 shed light.

But from 1900 a great improvement set in gradually, for from this time there were good years for agriculture. Nevertheless landed property was not freed from debt. Statistics as to mortgage transactions in the rural districts of Western Prussia show that the excess of fresh mortgages over redemptions has largely increased since 1886. In the period from 1902 to 1911 land was mortgaged in Western Prussia for more than 525,520,000 marks in excess of the redeemed values.

The following figures show this excess of mortgages over redemptions in the rural districts of Western Prussia :

Years	Millions of Marks
1886.	9.50
1887.	0.18
1888.	3.43
1889.	8.81
1890.	3.08
1891.	5.27
1892.	2.69
1893.	2.74
1894.	4.73
1895.	7.71
1896.	6.76
1897.	11.74
1898.	12.70
1899.	16.65
1900.	17.62
1901.	24.77

The following figures show the like excess for the period 1902 to 1911 :

	Fresh Mortgages — Millions of Marks	Redemptions — Millions of Marks	Excess of Fresh Mortgages over Redemptions — Millions of Marks	Percentage of Fresh Mortgages constituted by Redemptions
1902 Western Prussia . . .	69.88	43.83	26.05	62.7
1903 » »	68.05	52.18	15.87	76.7
1904 Dantzig	24.91	18.86	6.05	75.7
Marienwerder.	42.55	36.46	6.09	85.7
1905 Dantzig	26.42	16.08	10.34	60.9
Marienwerder.	40.77	31.20	9.57	76.5
1906 Dantzig	33.25	23.42	9.83	70.4
Marienwerder.	52.09	29.88	22.21	57.4
1907 Dantzig	33.39	15.53	17.86	46.5
Marienwerder.	51.94	24.98	26.96	48.1
1908 Dantzig	28.20	17.19	11.01	61.0
Marienwerder.	54.37	39.26	15.11	72.2
1909 Dantzig	33.82	17.01	16.81	50.3
Marienwerder.	59.78	33.67	26.11	56.3
1910 Dantzig	38.20	19.72	18.48	51.6
Marienwerder.	72.49	39.52	32.97	54.5
1911 Dantzig	41.49	21.29	20.20	51.3
Marienwerder.	77.30	44.30	33.00	57.3
			325.52	

Thus Western Prussia is shown to have provided much business in mortgages. The excess of fresh mortgages over redemptions generally increased every year until 1902, when it reached the maximum of 26.05 million marks. Subsequently in 1903 and 1904 it decreased, but increased after the latter year until in 1911 it was 53.20 million marks. During the latter period it diminished only in 1908. The large excess of fresh mortgages over redemption in the later years should be ascribed to changes of ownership and the large increase in the price of land in Western Prussia. This increase is itself due to the larger amount of credit furnished by the *Landschaften*. Further, farming has made real progress, stock has been increased to an extent which is not negligible, and numerous works of improvement have been brought to a conclusion on the land.

In the period after 1902, that is after the statistics as to the land's indebtedness had been made out, forced sales of estates by auction accounted for no large sum of money. From 1902 to 1911 there were in Western Prussia forty-seven forced sales by auction of estates of more than 100 hectares and for a total sum of 14,807 marks.

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As regards the form of indebtedness and the manner in which it is incurred, it is based, as has been said previously, on the genuine credit afforded by the *Landschaften*.

In Western Prussia there are two *Landschaften*, one for the lands of the nobility and the large landed proprietors which is called *Ritterschaftliche westpreussische Landschaft*, and one for the lands of the peasants and the small freeholds (known as Köllmer) which is called *Neue westpreussische Landschaft*.

In order to realize practically a disencumberment of the land, a bank — the *Deutsche Bauernbank* (*German Peasants' Bank*) — was founded on 28 March 1906; and on 23 October 1911 the *Lebensversicherungsanstalt Westpreussens* (1) was formed with the same aim.

SWITZERLAND.

SCHWEIZERISCHES FINANZ-JAHRBUCH 1916 XVIII JAHRGANG (*Swiss Financial Yearbook* 1916, 18th *Year*) 655 pp. Berne, Neumann and Zimmermann 1916.

In spite of the difficulties belonging to the present time Switzerland has punctually issued for the current year her financial yearbook, which concerns the period between the middle of 1915 and the middle of 1916.

According to the precedent established by former issues the book is divided into six parts. The first is concerned with economic development in 1915-1916; the second with the finances of the State and its subdivisions, those namely of the Confederation, the cantons and the towns; the third with the course of exchange; the fourth with banks; the fifth with railways; and the sixth with insurance. As regards banks we find, on referring to the data which we have already published in this Review (2), that at the end of 1915 there were according to official statistics 641 banks, savings banks and co-operative credit societies, of which 234 had an importance especially local. This yearbook contains no information as to co-operative credit societies nor as to some other financial institutions, for it has been impossible to obtain their reports and balance sheets. The account which appears in the yearbook includes only 407 banks and savings banks, but these, be it said, comprise all the more important institutions. As regards the Federation of Swiss Cantonal Banks, which combines twenty purely State banks and two banks of mixed character, it is to be noted

(1) Life Insurance Institution of West Prussia.

(2) See *International Review of Agricultural Economics*. March 1916, p. 77: Swiss Mortgage Banks; June 1916, p. 95, Business of Advances on Mortgage transacted by Cantonal Banks and Local Banks.

that these twenty State banks had a circulating capital, and the two banks of mixed character had a capital in shares, amounting altogether to 281,500,500 francs (1) as against 278,000,000 francs in 1914 ; 276,000,000 francs in 1913 ; and 241,500,000 francs in 1912. The reserve funds of all these banks amounted to 64,453,642 francs — as against 61,647,290 francs in 1914 ; 58,609,041 francs in 1913 ; and 54,867,935 francs in 1912. The net profits reached 20,794,745 francs — as against 19,659,641 francs in 1914 ; 20,787,623 francs in 1913 ; and 17,137,534 francs in 1912. The balance sheet accounts for 2,906,658,791 francs — as against 2,790,978,047 francs in 1914 ; 2,681,337,148 francs in 1913 ; and 2,493,102,346 francs in 1912.

The last part of this yearbook is given up to insurance — life, accident, fire and transport insurance and insurance of various other kinds — and to reinsurance.

(1) 1.2611 francs = 1*s* at par.

Part IV: Agricultural Economy in General

AUSTRALIA.

LAND SETTLEMENT AND THE PROVISION OF CREDIT IN WESTERN AUSTRALIA

by J. W. PATERSON
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§ 1. INTRODUCTORY.

Area of Western Australia. — Western Australia is the largest State of the Australian Commonwealth, and indeed it forms 32.81 per cent. of its land surface. It extends to 624,588,800 acres, or not very far short of 1,000,000 square miles, being over three times larger than New South Wales, and eleven times larger than the State of Victoria. Western Ausrtalia has long been known for its output of gold, also coal, copper, tin, lead and hardwood timbers. It is more recently that its agriculture has made rapid strides. It is a large State, and it contains much land unsuitable for agriculture. Absolutely, if not relatively to its size, it also contains much useful land in districts where the rainfall is sufficient to ensure profitable wheat and other crops. It is not particularly well suited for dairying, but it embraces wide-spread areas of grazing country, which, with the market prospects for wool, form a very valuable asset.

Climate. — In the northern parts of the State the rain falls entirely in the summer months, when vegetation is extremely rapid: in the south-west division it comes almost entirely (70-90 %) as " winter " rains during the growing period of the wheat crop. The Kimberley and north-west divisions at present contain a number of large stock runs and sheep stations, and are probably too hot for cultivation by white labour; cotton and tropical fruits are said to do well on suitable soils. Agricultural, as distinct from pastoral, settlement is confined almost entirely to the south-west.

Natural Hindrances to settlement. — The tracts of land in Western Australia which are unsuited to any sort of farming or grazing are very large indeed, and probably represent from 50 to 66 per cent. of the total area of the State. Such land is economically useless for the purposes stated, either because the soil is too poor, or because the rainfall is insufficient, or because the land is too heavily timbered to pay for the cost of clearing. The last named difficulty is prominent in the wetter districts of the south west, where are found immense forests of marketable hardwoods — jarrah, karri and blackbutt — the estimated area being 31,875 square miles. Much of this land is wisely reserved for its timber, the cost of clearing for agricultural purposes being often prohibitive. Certain sections of the south west also are rendered unfit for pastoral purposes by the growth of poison plants among the herbage, which, if too bad, cost more to eradicate than the land is worth. In a diminishing number of cases also, sheep farming is checked by the raids of dingoes. Some of the difficulties which at present beset agricultural and pastoral settlement in individual districts will gradually be surmounted; others of them, and especially disabilities of soil or climate, will often be permanent. Neglecting, however, all such temporarily or permanently nseless lands, there still remain large areas which have an immediate economic value.

Agricultural production in the State. — Wheat, animal products, and especially wool and fruit, are undoubtedly the cheap farm products which the world demands from Western Australia, and these she is certainly adapted to produce. The advance made in the production of these commodities in recent years is phenomenal. The following figures, compiled from the Commonwealth Year Book (1914), indicate the new development:

TABLE I. — *Agricultural Production in Western Australia.*

Season	Area under Crops	Orchards (1)	Horses	Cattle	Sheep
	Acres	Acres			
1913	1,537,923	20,575	156,636	834,265	4,421,375
1900	201,338	6,076 (2)	68,253	338,590	2,434,311
Increase	1,336,585	14,499	88,383	495,675	1,987,064
Do. per cent	664	239	129	146	82

(1) Included in crop area. — (2) 1901.

Cattle are chiefly located in the Kimberley and north west divisions, but the larger number of sheep are in the south west and south. In 1913 an area of some 190 million acres was held under pastoral, conditional purchase and grazing leases.

Causes of recent progress. — The area under crops is found almost entirely in the cooler south west division of the State, and the large increase in recent years is of a kind to suggest that the capabilities of the land there for settlement have only recently been discovered. As a matter of fact the increase of agricultural production has only been made possible during recent years. A number of factors have been introduced which have given the lands a new agricultural value. Prominent among these may be mentioned :

The stump-jump plough,
The combined stripper and harvester,
The use of superphosphate,
The provision of transport.

Regarding the stump-jump plough, this enables land to be cultivated after surface clearing while the roots are still in the ground. The economic importance of thus enabling the new settler to obtain a crop without waiting until the tree roots have been laboriously grubbed out, can scarcely be overestimated. Then the combined harvester which reaps, threshes, winnows and bags the grain at one operation confers an immense saving in the costs of production as contrasted with the method of stooking, carting, stacking and threshing necessarily adopted in more humid climates. With labourers' wages at 7*s.* to 10*s.* per day ordinary methods of harvesting would exclude wheat growing in the State. Another innovation which pas been practically essential to success is the use of small quantities of superphosphate — usually about ½ cwt. per acre — which in many cases doubles the yield, and in practically all is required to raise the value of the crop above the cost of production. Science is helping the farmer in other ways. A fourth innovation essential to success has been the provision of transport. During the 12 years (1901-13) the railway lines open for traffic increased from 1360 to 2967 miles — the most of the new mileage being laid down in order to serve the agricultural districts by conveying the necessary stores and raw materials to the farms, and finally conducting the produce to the ports.

Area and distribution of crops. — In view of the large increment in the area under crops, it is interesting to note what kind of crops are grown. In Table II, compiled from official returns, the latest available data are summarized.

TABLE II. — *Area and distribution of crops* (1913).

	Area	Proportion of Area under Crops
	acres	per cent.
Wheat	1,097,193	71.34
Hay	246,640	16.04
Oats	133,625	8.69
Orchards & Fruit	20,575	1.34
Green Forage	13,126	0.85
Barley	11,502	0.75
Potatoes	5,229	0.34
Vineyards	2,864	0.19
All other	7,169	0.46
Total	1,537,923	100.00

Wheat for grain is the principal crop. Regarding the hay, official returns show that of the total hay 79 per cent. was wheaten hay cut in the green stage. The balance of the hay was almost entirely oaten hay cut before it was quite ripe. Oats for grain came third in point of area. Other crops occupy a minor position. Taking together the three common cereals as sown either for grain or hay, these together occupied over 96 per cent of the area under crop within the State.

Seasonal rains and wheat yields. — The monthly distribution of the rainfall in Western Australia is certainly favourable for wheat growing in its southern districts as from 70 to 90 per cent. falls between April and October — the growing period of the crop. In the eastern States a large part of the annual fall is received during the summer months when it is for wheat-growing practically useless. In accordance with this difference in seasonal distribution, the wheat yields of the State are considerably better than a mere statement of annual rainfall would lead one to anticipate, because most of the rain falls at the season when it does most good. The practically dry summer of the southern areas, extending from three to five months, is however disastrous to the formation of really good natural pastures, and hence dairying is handicapped although the large areas carry over sheep well. The following Table shows the average yields of wheat per acre in the four chief wheat-growing States of the Commonwealth during the present century.

TABLE III. — *Average yields of wheat per acre.*

Season	N. S. Wales	Victoria	S. Australia	W. Australia
	bush.	bush.	bush.	bush.
1901	10.64	6.91	4.60	10.19
1902	1.24	1.29	3.64	10.67
1903	17.51	14.49	7.72	13.60
1904	9.27	9.26	6.53	11.06
1905	10.69	11.31	11.46	11.83
1906	11.69	11.13	10.19	11.02
1907	6.59	6.55	10.91	10.46
1908	11.11	13.12	11.45	8.63
1909	14.34	13.72	13.26	12.48
1910	13.11	14.52	11.57	10.14
1911	10.54	9.65	9.29	7.12
1912	14.56	12.58	10.34	11.56
1913	11.86	12.84	7.47	12.15
Average	11.01	10.57	9.11	10.83

As compared to the yields in the other States the returns for Western Australia are obviously satisfactory. An apparent feature is their steadiness, the yields being relatively less subject to fluctuation as a result of dry seasons than those of the other States. Apparently this has been characteristic over a long term of years.

More population wanted. — Realizing that certain forms of agriculture are well suited to a large area of the southern districts, the government of Western Australia is now pursuing an active policy of land settlement. At the beginning of 1915, the entire population amounted to 323,018 souls, giving a density for the whole State of only 33 persons to the square mile. The country requires more population for economic as well as political reasons. Western Australia like the other colonies of the empire does not invite colonists for philanthropic reasons, but because it believes that they can make a success, and because it knows that this success will be to the advantage of the State. It would often be useful if intending immigrants realized this fact before leaving home — in that case new colonists would be fewer in number, but they would be of a harder class.

§ 2. LAND TENURE AND SETTLEMENT.

The freehold of land may be purchased from private owners, and the area of land already alienated from the crown in 1914 was 7,795,319 acres.

This figure, however, includes roads and public reserves. The government also offers large areas of land for selection under various schemes of conditional purchase. The conditions generally include residence on the holding, the execution of certain improvements, and provide for terms of deferred payments extending over a series of years. When the conditions have been fulfilled a crown grant for the lands may be issued to the selector.

The Land Act (1898). — As in the other States the settlement of crown lands has been the object of much legislation. The Land Act (1898) which consolidated previous Land Acts, has in turn been amended at various times up till December 1915, and with such amendemnts is now in force. It is sufficient to summarize the main provisions under which land may be selected.

Free homestead farms (Section 74). — Free homestead farms are granted for £1. 1*s*. 0*d*., and the survey fee when separate survey is required. If included in a larger block of 500 acres, or over, already surveyed, no further charge is made for survey. Any person who is the head of a family, or a male over 16 years who does not already hold more than 100 acres, may obtain a homestead farm. He must, however, reside on the farm for six months of each of the first five years, and spend on improvements an aggregate sum of 14*s*. per acre in certain periodical instalments during the first seven years. Of the amount spent on improvements £30 may go towards a house, and part towards the fencing of the property which must be completed in seven years. Half the cost of fencing is credited as improvements. At the end of this period, and provided the conditions have been complied with, a crown grant may be acquired costing £ 1.10*s*.0*d*.

Conditional purchase with residence (section 55). — This section of the Act deals with cultivable lands only. Areas of from 100 to 1000 acres of such lands, which may include a free homestead block, are granted under conditional purchase (C. P.) at prices ranging from 10*s*. per acre upwards, payable in half-yearly instalments. If the purchase money be 10*s*. per acre, the price is payable at the rate of 6*d*. per annum during 20 years, and if 15*s*. per acre at 6*d*. per annum during 30 years. If the price be over 15*s*. per acre, the sum is still repaid in 30 years, but at a higher annual rate. The latest amendment also provides that payments under this section may be deferred for five years if the land be over 12 ½ miles from the railway. The scheme requires residence for six months of each of the first five years either by owner, wife, parent or child over 16. Improvements during the first ten years must in the aggregate equal the purchase money (but need not exceed £1 per acre), at the rate of one fifth of the purchase money every two years from date of occupation. Improvements include that one half of the land must be fenced within five years and the whole within ten years. Half the cost of exterior fencing is credited as improvements.

Conditional purchase without residence (Section 56). — Under this section 1000 acres of cultivable land can be selected without conditions of residence. It is provided that the total value of the improvements during ten years shall be 50 per cent. over and above the amount of purchase money,

but need not exceed 30s. per acre. The occupier of an adjoining farm under residential conditions may also select under this section, which may give him a total holding of 2000 acres.

Conditional purchase by direct payment (Section 57) — Under this section a similar area of land, at a similar price to that of the two preceding sections may be acquired by direct payments during the first twelve months. The purchaser must within three years ring-fence the whole of his land, and within seven years expend in prescribed improvements, in addition to the exterior fencing, an amount equal to 10s. per acre. In practice this section of the Act is little availed of.

Area of wheat farms. — The minimum area of land taken up in the wheat-growing districts in usually 1000 acres. The calculation is that one man and team can work from 250 to 390 acres of crop in one year. With one team the wheat can then be worked in rotation with fallow and sheep — a system which only takes one crop from the same land every two or three years. The year of fallow in districts below the 15 degree rainfall level is most desirable in order to store up soil moisture; fallowing, moreover, permits the work of ploughing and preparing the land for the next crop to be performed while the present crop is growing. It also, and particularly with a three years' rotation carrying sheep, enables the stubble or straw left standing by the harvester to be ploughed in and thus maintain the supply of humus; otherwise straw would be burnt off. Large farms in the wheat belt are on these grounds encouraged as a matter of policy. While 2000 acres of cultivable land is the maximum allowed to one holder, under section 55 along with 56, the holder's wife (or husband) may still acquire an additional 1000 acres under non-residence conditions. The larger area is often useful in the case of a family working several teams.

Farms in the south west. — In the heavier rainfall districts of the south west the conditions are too wet for wheat farming, and less extensive systems of cultivation with less definite objects prevail. The farms there are typically smaller, and often no larger than the free homestead block. In some of the districts 320 acres is the maximum area allowed. The best fruit growing lands are in those districts and much attention is given to the development of the industry, the quality of apples and pears in particular being of the first class. Much attention has also been given to the development of mixed farming and dairying, but the matter is one of some difficulty. For this result the dry months of summer and the initial cost of clearing the land for the plough are chiefly responsible.

Costs of clearing. — On the large farms of the wheat belt the natural timber and scrub is lighter, and the cost of clearing bush lands there for the plough usually ranges from 15s. to 25s. per acre. The cost is credited to improvements. In the wetter mixed farming districts of the south west the clearing is much heavier and may cost from £5 to £25 per acre. It is so heavy that — except for orchard purposes — it will often render the undertaking unprofitable to the pioneer. Moreover, the land commonly also requires drainage.

Conditional purchase of land for orchards, vineyards or gardens (Section

60). — Small blocks of 5 to 50 acres can be acquired at from 20*s.* per acre payable by instalments within three years. The sale is made under certain conditions of fencing and partial planting of the area within four years.

Conditional purchase of grazing lands (Section 68). — This section deals with non-cultivable lands suitable for grazing. Areas of 300 to 5000 acres of such lands may be acquired under the Act at prices ranging from 3*s.* 9*d.* up to 10*s.* per acre payable in 40 half-yearly instalments, and subject to certain conditions of residence during the first five years by the selector, his agent or servant. Improvement valued at one fifth of the purchase money must be made every two years of the first ten years. Half the cost of fencing is credited as improvements. If the land carries poison plants the price may now be reduced to 2 *s.* 6 *d.* this provision being also retrospective for lands selected after 1905.

Maximum areas. — In estimating the area held by a selector 2500 acres of grazing land is reckoned equal to 1000 acres of cultivable lands, and therefore a person holding 1000 acres of the latter may select a further 2500 acres of grazing land, or if he hold 2000 acres of cultivable land under residence and under non-residence conditions his wife may select 25000 acres of grazing land.

Crown grants. — Selectors under the deferred payment schemes (Sections 55, 56 and 68) may at any time after five years acquire the crown grant of the lands provided the required conditions have been fulfilled and the full purchase money paid. Selectors under the direct payment scheme and selectors of orchard land (Sections 57 and 60) may obtain the crown grant at any time after the conditions have been fulfilled.

Transfers. — In the case of farms taken under residence conditions, no transfer of a homestead farm or conditional purchase lease is allowed (except in special cases) until the expiry of two years from the commencement of the occupation certificate, and unless the full amount to be spent on improvements during the first five years has already been disbursed. In the case of farms acquired under non-residence conditions no transfer is allowed until the expiry of five years, and unless the full amount required to be expended during the ten years period has been accounted for.

Pastoral leases (Sections 93 to 98). — Apart from conditional purchase of land, large areas of grazing land may be leased under the Acts at an annual rental. The rent is almost nominal and in different divisions of the State ranges from 3*s.* up to £1 per 1000 acres. The minimum area is usually 20,000 acres, and sometimes 50,000 acres, as in the Kimberley division, according to location. The Act generally prescribes that pastoral leases shall be stocked at the rate of ten sheep or one head of large stock for every 1000 acres within two years from their commencement, failing which they are liable to forfeiture. Before any land in a pastoral lease is made available for selection) under conditional purchase it must (except in the south west division be resumed, and 12 months' notice be given to the lessee who is also entitled to compensation for any prescribed improvements on the land so resumed. All pastoral leases granted under the Act expire in December 1928.

Closer settlement. — Apart from the settlement of crown lands the gov-

ernment may also repurchase alienated lands for the purpose of cutting them up into blocks of suitable size and throwing them open for settlement on certain terms and conditions. In Western Australia, lands wanted for closer settlement can only be acquired voluntarily. Under the Agricultural Lands Purchase Act (1909), which repealed and consolidated previous legislation, sums not exceeding £400,000 in the aggregate (since increased to £600,000) may be expended on the repurchase of lands near the railways suitable for immediate cultivation. A Land Purchase Board has been appointed to administer the Act. After reservation of part of the land for public purposes, the remainder is thrown open for selection — the selling price being then equal to 105 per cent. of the purchase price plus the cost of any improvements. Payments of principal and interest are spread over 20 years in half-yearly instalments of £3.17*s.* 9*d.* for each £100 of the selling price. There are also improvement conditions similar to those of sections 55 and 56 of the Land Act. The maximum area selected under the scheme must not exceed 1000 acres; in special cases 2000 acres. Table IV shows the transactions effected under the closer settlement scheme up to date.

TABLE IV. — *Closer settlement in W. Australia at certain dates.*

Year	Total area acquired to Date	Total Purchase Money	Roads Reserves etc.	Total made available for selection	Area selected during year	Total area occupied to date	Balance available for Selection	Total Revenue received to date
	acres	£	acres	acres	acres	acres	acres	£
1901	46,624	52,764	1,459	45,165	4,295	37,235	7,929	14,451
1910	249,522	158,041	10,757	228,823	25,134	213,416	15,407	111,125
1911	297,391	262,302	14,876	282,515	50,032	261,942	20,573	129,386
1912	303,469	270,622	14,506	282,885	8,375	264,885	18,000	151,110
1913	446,804	421,333	12,799	290,670	10,835	270,945	19,724	175,245
1914	446,804	421,333	128,605	315,133	2,451	268,260	46,873	219,675

The year 1901 ends on 31 December; other years on 30 June.

Rents. — All rents and conditional purchase instalments of crown lands payable to the government are due half-yearly in advance on 1 January and 1 July, but are payable without fines during the next two months. With delayed payments thereafter 2*d.* per £1, is charged for one month, 6*d.* for two months and 1*s.* for three months. Thereafter in case of non-payment the land may be forfeited.

Progress of land settlement. — The progress of land settlement and land alienation is indicated in Table V (adapted from the official statement) which shows the state of affairs in 1901 and in each year from 1909 to 1914 inclusive.

TABLE V. — *Lands already alienated and in process of alienation.*

Year	Alienated	In process of alienation	Held under lease or license	Occupied by the crown or unoccupied
	acres	acres	acres	acres
1901	3,468,878	6,116,266	97,450,660	517,552,996
1909	4,343,808	11,342,024	163,576,742	445,326,226
1910	4,449,329	12,880,195	167,236,201	440,023,075
1911	7,202,696	11,843,236	169,937,644	435,605,224
1912	7,387,929	13,405,369	175,677,865	428,117,637
1913	7,606,759	13,755,787	188,547,418	414,678,836
1914	7,795,319	13,853,630	184,277,656	418,662,195

The year 1901 ends 31 December; other years 30 June.

It is apparent that within the last 12 years substantial progress has been made — the area actually alienated from the crown having increased by 125 per cent.; and land in progress of alienation under deferred payment or other conditions by 127 per cent. The large area originally held under lease even increased by 89 per cent. A small portion of the leasehold increase, it is true, was due to timber, mining and non-agricultural leases, but the area involved is relatively negligible. In absolute numbers the area of land alienated or in process of alienation has increased by 12,063,805 acres in 12 ½ years, or on the average by nearly one million acres per annum.

Size of holdings. — In view of the rapid development of land settlement in recent years an interesting statement is that relating to the number and size of the holdings. In Table VI the information is supplied in the form given in the Commonwealth Yearbook.

TABLE VI. — *Number of holdings alienated or in process of alienation.*

Size of Holdings	1900-01	1909-10	1910-11	1911-12	1912-13	1913-14
acres	number	number	number	number	number	number
1 to 50	1,728	3,078	3,135	3,274	3,656	3,820
51 » 100	198	517	549	571	609	608
101 » 500	2,302	3,318	3,212	3,171	3,320	3,354
501 » 1,000	717	2,320	2,777	3,024	3,465	3,569
1,001 » 5,000	607	2,200	2,616	2,967	3,545	3,912
5,001 » 10,000	73	170	189	200	213	240
10,001 » 20,000	38	88	79	77	82	82
20,001 » 50,000	36 (1)	29	24	26	28	27
50,001 & over	—	6	7	6	7	8
TOTAL . . .	5,699	11,726	12,588	13,316	14,925	15,620

(1) Including all holdings of 20,001 acres and upwards.

The most rapid and important increases are in the size classes of 501 to 1000 and 1001 to 5000 acres which have increased respectively by 398 and 544 per cent. The sizes named are those best suited to wheat growing in which rapid development (Tables I and II) has taken place. Farms from 101 to 500 acres on the contrary have increased by only 46 per cent. This size of farm is chiefly situated in the more heavily timbered and wetter parts of the south west where the greater costs of clearing and other factors render the immediate prospects of success less favourable. These holdings aim chiefly at dairying and mixed farming and are not well suited to wheat. The increase in holdings of 51 to 100 acres, amounting to 207 per cent., is largely associated with the development (Table I) of the fruit industry to which the climate is admirably suited. Part of the holdings of from 1 to 50 acres, which have increased by 121 per cent., are also utilized for fruit growing. The totals indicate an important advance in the establishment of freehold farms within the State.

(*To be continued*).

AUSTRIA AND HUNGARY.

THE QUESTION OF FORESTRY IN BOSNIA AND HERZEGOVINA.

OFFICIAL SOURCE:

VERWALTUNGSBERICHTER LANDESREGIERUNG 1878, 1906 (*Reports on the Administration of Bosnia and Herzegovina*). Serajevo, 1911.

OTHER SOURCES:

DIMITCH (L.): DIE FORSTLICHEN VERHÄLTNISSE UND EINRICHTUNGEN BOSNIENS UND DER HERZEGOWINA (*Conditions and Institutions of Forestry in Bosnia and Herzegovina*). Vienna, 1915.

SCHMID (Dr. F.): BOSNIEN UND DIE HERZEGOWINA UNTER DER VERWALTUNG OESTERREICH-UNGARNS (*Bosnia and Herzegovina under the Administration of Austria-Hungary*). Leipzig, 1914.

§ 1. WOODLANDS. QUALITY AND VARIETIES OF TIMBER.

In respect of the area of their forests Bosnia and Herzegovina occupy the second place among all States of Europe; they come next to Finland where 56 per cent. of the whole territory of the country is wooded.

According to the statistical data of 1909 the wooded area of the two provinces is 2,554,771 hectares (1), that is 50.06 per cent. of their entire territory; and of such woodlands 2,159,232 hectares are found in Bosnia and 395,539 hectares in Herzegovina, constituting 51.52 per cent. and 43.37 per cent. of the separate areas of the respective provinces.

The official statistics give no data as to the woodlands in each district, but merely mention districts of Bosnia as being more or less richly wooded.

Of all the departments of Bosnia that of Sarajevo is most richly wooded, its woodlands covering 65 per cent. of its total area. The most wooded district is Chadagn where 83 per cent. of the land is woodland; in Trevnik, the least wooded department, such percentage is 44, and in Zupagnaz, the least wooded district, only 8.

(1) 1 hectare = 2 acres 1 rood 35.383 poles.

If we consider the provinces in respect of the quality of their timber we find that it is divided in Bosnia and Herzegovina into the three following categories :

1) woods of fully grown forest trees ; 2) woods of young forest trees ; 3) woods of shrubs and bushes.

The woods of fully grown forest trees cover an area of 1,511,928 hectares — 1,409,529 in Bosnia and 102,399 in Herzegovina.

The area occupied by young forest trees is 560,494 hectares — 477,507 in Bosnia and 82,987 in Herzegovina.

Finally the woods of shrubs, bushes and hedges are distributed as follows — 272,196 hectares in Bosnia and 210,153 hectares in Herzegovina, giving a total area of 482,349 hectares.

These figures show that the woods of fully grown forest trees are more numerous in Bosnia than those of young trees : the former occupying 65.27 per cent., the latter 22.12 per cent., and the woods of shrubs and bushes only 12.61 per cent. of the whole wooded territory.

In Herzegovina on the other hand woods of the last named category predominate, extending over a territory estimated as 53.14 per cent. of the whole woodland, while the woods of forest trees, young and fully grown, cover respectively 20.98 per cent. and 25.88 per cent. of the whole woodland.

We proceed to a consideration of species. The statistics give no facts beyond those which concern the woods belonging to the State. But since 75.64 per cent., or according to Dimitich 78.40 per cent., of all the woodland belongs to the State it follows that these statistics are of the greatest importance.

In the State forests, which occupy 1,932,602 hectares, the distribution according to species is as follows :

a) Fully grown forest trees — 1,357,915 hectares divided as follows : conifer pines 365,092 hectares, namely 356,762 in Bosnia and 8,333 in Herzegovina; beech woods 542,372 hectares, namely 464,849 in Bosnia and 77,523 in Herzegovina ; oak woods 100,654 hectares, namely 98,484 in Bosnia and 2,170 in Herzegovina ; woods of mixed trees 349,797 hectares, namely 340,712 in Bosnia and 9,085 in Herzegovina.

b) Young forest trees, 346,861 hectares — 130,966 hectares of oak woods, namely 108,637 in Bosnia and 22,329 in Herzegovina ; woods of various trees 215,895 hectares, namely 177,550 in Bosnia and 38,345 in Herzegovina.

From these facts the following deductions may be made :

a) of all species of trees that found most commonly is beech which in Bosnia covers 29 per cent. and in Herzegovina 30 per cent. of the whole wooded area ;

b) the next species in order of importance is in Bosnia the conifer pine — 21 per cent. of the woodland, and the oak — 12 per cent.; in Herzegovina the oak — 9 per cent, and the conifer pine — 3 per cent.

In Bosnia woods of various trees occupy 30 per cent. of the whole wooded territory and in Herzegovina 18 per cent. In Bosnia they comprise

beeches and conifer pines or beeches and oaks, in Herzegovina only beeches and oaks.

In Bosnia woods of shrubs and bushes are not much found and occupy hardly 8 per cent. of the woodland; but in Herzegovina, where they are numerous, they cover 40 per cent. thereof.

The Administration of Forests proceeded to examine in the gross the quantity and quality of the timber in the State woods of forest trees, and although this investigation has only a relative value the resultant statistical data are very interesting. We think it well therefore to reproduce here the statement that the gross quantity of timber in these woods has been estimated at some 300 million cubic metres (1), namely 120 million of conifer pinewood and 180 million of the wood of trees bearing foliage. Of these 300 million cubic metres 50 per cent. is fit for use, the other half being defective wood.

§ 2. The ownership of the woodland.

Under the Turkish dominion the tenure of the woodland had the same character as that of landed property in general. According to the laws then in force — especially that of 1857 — the rights in land of this character were as follows:

1) *Woodlands in private ownership*, subdivided into

a) "Mulk" — woodland belonging to private individuals or private societies;

b) " Vakouf " — woodland belonging to mosques or religious foundations;

2) *Woodlands in State ownership* which had four different forms:

a) " Mirija " State woods of which the usufruct had been given to private individuals, private societies, mosques or religious foundations, etc.;

b) " Baltalic " State woodland of which the usufruct had been given to the communes;

c) " Mubah " State woodland intended for public use;

d) Domanial woods directly employed by the State.

This legal division did not however always correspond to the actual state of affairs, and such correspondence became less and less with the passage of time. In point of fact " Mirija " lands became " Mulk ", the usufructory taking advantage of the vicissitudes of the Turkish government to obtain possession of them, even illegally. " Baltalic " and " Mubah " woodland was subsequently deforested by private individuals and transformed into their personal property, without any consent on the part of the State, the true owner.

In 1869 the Turkish government attempted to regulate jurisdictory relations and the employment of the woods of Bosnia and Herzegovina, and was guided by the principles on which all forest law in Western Europe is

(1) 1 cubic metre = 1.308 cubic yards.

based. A law was promulgated in virtue of which the government would have regained the power directly to cultivate and administer all the woodland belonging to the State. But an obstacle to the execution of this law was found in the people, according to whose conception of landed property the State's *jus nudum* should be completed by the *jus utendi et fruendi* of the citizens. To the people the position that the State directly cultivates its own domanial property, to the exclusion of the usufruct of the citizens, is absolutely inconceivable. The law was promulgated but not applied. It remained a dead letter, and jurisdictory relations with reference to the ownership of woodland were unchanged.

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Immediately after the Austrian and Hungarian occupation the examination of the forest question in Bosnia and Herzegovina was entrusted to a commission. This commission, having realized how rich these two provinces were in woods, presented a report in which the immediate necessity of determining jurisdictory relations, in order that the woodland property might be organized and regulated, was affirmed.

At the end of 1878 a decree was promulgated, on the proposal of this commission, which contained rules for the nomination of forest commissions to whom the distribution of rights of property in the woodland was entrusted.

In 1879 another decree ordered the population to deliver all documentary evidence as to rights of ownership and usufruct in their woodlands to forest commissions.

By a complementary decree of 1881 the term of thirty days was fixed for such delivery. None of these decrees were however applied until 1884, the time at which the work of the cadaster was finished.

On 18 March in this year the new law which determined the limits of rights of property in forests was promulgated. Subsequently there were nominated new commissions charged to solve in every district the delicate problem which this form of property presented, and they discharged their duty between 1884 and 1901 (1).

Before giving the data as to rights of forest property it will be well to indicate the criteria observed by the governement in determining them.

The law of 1884 did not modify the fundamental conceptions of Turkish law with regard to landed property. Forests were divided only into two categories — into those belonging to the State and those in private ownership. According to Turkish law the communes enjoyed only the right of usufruct. This was preserved to them, suitably modified, but no direct ownership was granted to them.

(1) The limits of property rights in forests extending over more than 5 hectares were fixed according to the enactments of the law of 1884. As regards rights in properties of less extent the ordinary rules of the cadaster were applied to these.

The private owner of a forest had to prove, adducing documentary evidence, the legitimacy of his possession ; but the evidence was not sufficient to fix the limits between State and private property. The forest commissions were in fact authorized not to be guided rigorously by these documents but to let them have weight in accordance with such criteria as should seem to them in the different cases most equitable and most suitable.

Most often the commissions acted on the principle of freeing the State forests from the private rights which encumbered them whenever these were based only on unsupported claims and not on convincing documentary evidence. To avoid discussion persons advancing claims of this sort were granted a small portion of the State's woodland property.

The work of determining forest property rights was brought to a successful conclusion in 1901. According to official data these rights were distributed as follows:

	Bosnia — hectares		Herzegovina — hectares
1) *Domanial woods*:			
a) Woods of fully grown forest trees	1,260,807		97,108
" " young " "	286,187		60,674
" " bushes and shrubs	123,898		103,928
	1,670,892	+	261,710
	= 1,932,602 hectares		

of which 697,600 hectares represent the forests in which usufruct is reserved to the communes.

	Bosnia — hectares		Herzegovina — hectares
2) *Woods in private ownership*:			
a) Woods of fully grown forest trees	148,722		5,291
" " young " "	191,320		22,213
" " bushes and shrubs	148,298		106,225
	488,340	+	133,729
	= 622,069 hectares.		

Of these lands 19,577 hectares within the territory of Bosnia belong to mosques and religions foundations.

The data previously given show that 75.64 per cent. of the woodland is State property. So high a percentage is found in no other European country, and its existence is due to the fact that before the Austrian and Hungarian occupation landed property in Bosnia and Herzgovina was influenced by Islamic law.

§ 3. The employment of the woods.

A) *Tree-felling.* — Under the Turkish dominion there was no principle to regulate the felling of woods. Those of them which belonged to the domains — the " Baltalics " and the " Hubah " — were regarded by the population as *res nullius*, and everyone considered himself authorized to cut down trees in them for his personal use or for purposes of trade.

Tree-felling in woods in private ownership — " Mirija " and " Mulk " — was less irregular. The owner or usufructory cut down trees when he pleased ; others could not do so without the owner's leave. But wood was not only cut down as fuel or the material for work : some woods — both private and domanial — were felled or even burnt in order to obtain arable or pasture land.

In the oak woods along the Save which are part of the State domain the government granted to a foreign society the right to cut down timber in order to obtain staves and boards to export to France and Great Britain. This society had an unlimited right to carry on its enterprise and was not the least of the factors which caused the devastation of extensive woodlands.

Mention has already been made of the attempt of the Turkish government, by means of the law of 1869, to regulate the jurisdictory relations which determined the employment of the woods. In connection with this law different decrees were subsequently promulgated regarding the preparation of resin and pitch (1872), the dues to be paid for felling wood (1874 and 1875), the clearing by fire and otherwise of wooded territory (1875) ; but the law and these decrees were alike not applied, and forest economy, in consequence, derived no advantage. Only the decree having reference to the tax on tree-felling was enforced, and in consequence the government could receive a tenth of the value of all wood sold.

So irrational a system of employing the woods would certainly have led to their entire destruction if the lack of roads had not proved an obstacle to this. Only the woods near navigable streams of water and near towns could in fact be cut down.

After the occupation of Bosnia and Herzegovina by Austria and Hungary, the two provinces were provided with routes of communication which encouraged and facilitated the felling of woods. The natural protection afforded to the integrity of the woods by the lack of means of communication vanished, and woods were cut down on such a scale that the government was obliged to interfere and to promulgate protective laws.

In the period from 1879 to 1883 there were issued decrees against the burning of woods, decrees in favour of mountain pastures, and decrees to enable the recovery of taxes on tree-felling etc. ; but the lack of a cadaster made all these measures ineffective. Tree-felling could not be effectively regulated until after 1884, the date at which Bosnia and Herzegovina had completed the work connected with their cadaster. Rules were then made

first for the domanial woods, and afterwards, in 1890, for the woods in private ownership.

Tree-felling in domanial woods — Timber is felled in the domanial woods according to plans drawn up by the Forest Administration which take into account the particular conditions of different woodlands. These plans are of three kinds:

a) those which regard the felling of woods by the owners themselves or their grantees (these plans are much detailed);

b) those regarding woods in which a grant has been made allowing the felling of a certain limited number of trees;

c) those regarding woods of which the felling has been allowed for a private purpose.

In the two latter cases the plans do not contain many small details.

Tree-felling can be undertaken in several capacities:

1) *By the State directly*: The woods in which the State undertakes tree-felling directly are six in number and have a total area of 130,000 hectares. In the early period of the Austrian and Hungarian occupation the action of the State tended, thanks to this system, to encourage and advance the industry of the country, in that by it wood and charcoal were sold to local industrial enterprises directly and at low prices. But later it became customary to burn coal, and in consequence trees were cut down to produce not wood for charcoal burning but wood as the material for labour, especially as the material for railway sleepers.

2) *The right to fell trees granted to private owners*: According to the statistical data of 1911 fourteen wooded territories, having a total area of 451,756 hectares were granted to private firms. For the most part they were forests of conifer pines, and trees were felled in them to produce wood as the material of labour.

In the early period of the occupation the means of communication were so few that not many business men were prepared to undergo the risks of enterprise of this kind. The right to fell was therefore conveyed privately but since 1910 this system has been superseded by that of public auction.

The Forest Administration draws up the scheme and indicates the trees which may be felled. The grant is for a long term — from fifteen to thirty years — and the price to be paid by the grantee is calculated on the basis of the number of cubic metres of timber he may obtain, allowing from five to nine crowns (1) for a cubic metre. The figures either do not vary throughout the period of the contract, or are low for the first years and rise with the passage of time.

The State reserves the right to make use of the means of communication established by the grantee, for the purposes of the tree-felling which it undertakes directly. Obligations to private individuals attaching to the woods subsist unchanged.

The long term of the contracts has given rise to some criticism, for since wood rises in price every year the State thus suffers loss. But all

(1) 1 crown = about 10*d* at par.

attempts to conclude contracts for short terms have failed, for enterprise of this kind necessitates large preliminary expenditure on the establishment of the means of communication necessary to profitable tree-felling.

3) *Grant of the right to fell a number of trees previously determined*: Grants of this description are customary in the case of oak and beech forests, from which wood for sleepers, staves and industry is obtained. The price is fixed by calculating an average for all the trees in a wood by means of partial experiments. The State does not guarantee the number of trees thus calculated and indicated in the contract, and the grantee may not fell any trees not indicated by the Forest Administration.

4) *Tree-felling for trading:* This is undertaken by small contractors who buy from the State a certain number of trees at fixed prices which vary from three to five crowns a cubic metre, according to their quality. In this case also the Forest Administration indicates which trees are to be cut down.

5) *Felling for domestic use and free felling:* Wood is cut down, nominally without payment, by the peasants for their domestic use, whether as fuel or as material for the labour they undertake for their personal purposes.

The necessary permission is given by the Forest Administration, by whom the trees to be felled are marked. Under the Turkish dominion felling for domestic purposes involved no payment whatsoever. It is still nominally free but actually the peasants pay dues of 0.50 crown for a cubic metre of firewood, and 2 crowns for a cubic metre of wood which is the material of labour.

The Felling of private woods. — From the beginning of the Austrian and Hungarian occupation until 1890 the right of felling private woods was entirely unlimited. The rich owners and the usufructories (Kmet) were subject in the matter to no rule but that of their own will. By the law of 1890 this freedom has been limited in accordance with the importance of a given wood to adjacent territories, and in accordance with the holder's right, which may either be absolute or encumbered in favour of others. Private woods were divided into three classes. The first of these comprises the woods which are calld " protective " because they shelter neighbouring territories. It is the duty of the local Forest Administration to determine which they are, the holder's right to appeal to the Central Administration being safeguarded.

In woods of this class all tree-felling is forbidden saving in exceptional cases in which permission is given as regards trees which are chosen and marked by the Forest Administration.

The second class comprises woods let to the Kmet and those in which the right of property is limited by obligations in favour of outside persons. In these woods the owner and the usufructory have the unlimited right to fell trees for their personal use, but they may not do so for purposes of trade without the consent of the Forest Administration — a provision which exists in the common interest since the owner would suffer loss if the usufructory conducted unjustified fellings, and vice versa.

The third class comprises the private woods not considered to be " protective ", in which the right of property is limited by no obligations. In these the right to fell trees, whether for personal or trading purposes, is unrestricted, saving in the case when its exercise degenerates and produces real devastation. The Forest Administration may then intervene to restrain it.

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In scientific Reviews there has been much discussion as to whether tree-felling in Bosnia and Herzegovina reduces the forest wealth of these provinces irremediably or whether the loss can be repaired by the simple action of natural, annual increase. Competent persons do not agree on the subject. According to Dimitch forest wealth does not suffer from the tree-felling because this is compensated for by the natural growth which follows on it. Hoffman, on the other hand, considers that this form of wealth has largely diminished in the east of Bosnia and south of Herzegovina and that the reforestation of these two districts is in consequence absolutely necessary.

Considered apart from theoretical discussions the problem of reforestation is seen to be absolutely urgent. Its solution is necessary not only in the case of the State woods, whether these are felled by the State directly or by private grantees, but also in that of the Karst woods, which cover 29 per cent. of the area of the district and have been almost completely laid waste by their irrational use as pastures.

As regards State woods — whatever be the method by which trees are felled in them, the problem in their case presents no great difficulties. The Forest Administration in marking trees to be felled is careful to choose those which have well developed roots, and causes new shoots to be planted in the places left vacant by felling. Therefore to ensure reforestation it is enough merely to prevent pasturage in the woods for several years.

The reforestation of the Karst woods is, on the other hand, both more difficult and more costly. In them there is hardly any natural increase of trees and therefore it is absolutely necessary to have recourse to planting.

The results obtained during the thirty-six years of the Austrian and Hungarian occupation have not been satisfactory, only 48,587 hectares having been reforested.

If therefore it be recollected that in this country the conditions are very favourable to natural reforestation, light, heat and nutritive elements in the soil being present in abundance, the deduction must be that the slightness of results is due to especial causes ; and these are precisely the insufficient sums appropriated to reforestation and the irrational system of pasturage.

The official published statistics contain no data as to the quantity of wood cut down annually as fuel and raw material. We can therefore give here only approximate figures which we borrow from private publications

and from the tables showing the export of wood and the payments made to the State.

Ferdinand Schmidt gives us the data relative to the so-called " free " tree-felling. This accounted in 1909 for 1,621,715 cubic metres of timber. From the statistics of international commerce we discover further that in 1909 5,057,551 quintals of timber were exported, that is 595,290 cubic metres.

These figures refer to the felling by grantees of entire woods and of fixed numbers of trees.

From the tree-felling undertaken by the State directly, which furnishes 200,000 cubic metres of timber a year, the Treasury derives some 800,000 crowns. If to the former of these figures that referring to timber felled for trade, namely 200,000 cubic metres, be added, we find that 2,617,000 cubic metres of timber are cut down every year.

The State's receipts under this head amounted in 1909 to 6,256,170 crowns.

It should be noticed that tree-felling is not of use to the State only in bringing money to its coffers, but also furnishes a valuable asset to international commerce and to many industries, while it contributes to the facilitation of exchange by means of the routes of communication which contractors have established for the easier transport of felled timber.

The value of the timber exported in 1911 was as follows :

Wood as raw material	3,774,888	crowns
Railway sleepers	305,435	"
Staves	800,908	"
Boards	29,466,088	"
	34,347,319	"

This figure represents more than a fourth of the total value of the exports.

In 1906 the journeymen workmen employed in felling woods for grantees numbered 20,631, while 3,378 of them worked in the forests cut down by the State directly.

The number of labourers employed on work connected with tree-felling, outside those who have been mentioned, is not known, but the figures given are enough to show that the forests provide the population with a considerable amount of employment.

According to Schmidt the value of the plant installed by forest contractors in Bosnia and Herzegovina is as much as 35,023,539 crowns, 24,338,930 crowns being the sum sunk in means of communication which, as has been said, do not only serve for the easier transport of wood but are also of general economic use to the country.

B) *Pasturage in the forests.* — Under the Turkish dominion the irrational distribution of landed property in general, as well as the insecurity of property and of persons, contributed to the circumstance that the popula-

tion devoted themselves by preference to pastoral occupations. The laws by which the rights of pasturage on mountain lands were regulated were however extraordinarily confused.

The forests of the State and of the communes were considered by the peasants to be *res nullius* : every shepherd thought himself entirely at liberty to pasture his herds in them and to cut down branches in them for forage. It even happened sometimes, and not infrequently, that shepherds set fire to forests and uprooted trees or shrubs to increase the extent of the land for pasturage. To this practice is due the wasting of many forests, especially the Karst woods.

The law of 1869 and the decrees promulgated in support of it brought about no improvement in the state of affairs. Although the Turkish government was aware of the consequences which so barbarous a treatment of the woods, in order to transform them into pasturages, must have, it yet did not remedy the existing condition by appropriate laws. It should be added that the idea of unrestrained liberty to utilize the woods for pasturage was so rooted in the minds of the whole population that the government did not dare to open up the question by having recourse to especial measures or by introducing changes which would too abruptly have run counter to established usage in the country. The government, therefore, did no more than regulate pasturage where the need for regulation was most acute, by simple and incomplete administrative measures which were little adapted to the radical solution of the problem.

These were adopted in the recently reforested Karst territory at the frontier of Dalmatia and Herzegovina, and in the forests of the districts of Zapagnaz and Livno.

For the ten years which follow on reforestation all pasturage of any animal of any kind is forbidden. When these ten years are past the pasturing of sheep only is allowed ; that of cattle and animals of the goat tribe only after a further five years.

In Karst, near the Dalmatian frontier, the peasants of the adjacent Dalmatian villages, relying on ancient custom, enjoy the right of pasturing their herds in the woods, and this right was preserved to them even after the Austrian and Hungarian occupation but suffered certain limitations from 1886 to 1888. In consequence of these every village is obliged to declare how many heads of live stock of each kind it possesses. All the live stock of a village constitute a herd, and the Forest Administration determines from time to time the terms on which pasturage is allowed. For animals of the goat tribe the right of pasturage is limited.

By laws promulgated from 1895 to 1900 pasturage in the woods of the districts of Zapagnaz and Livno is likewise regulated.

§ 4. Forest administration.

The Forest Administration was formed in 1880. The whole territory was divided into twenty-seven districts, for each of which there was a

District Forest Administration. These local bodies depended on the Central Forest Administration which was a department of the Ministry of Finance.

In 1882, after Kalaj had entered on office, the Forest Administration was reorganized. The Central Administration was separated from the Ministry of Finances and attached to the Ministry of Agriculture, as an autonomous department. The forest districts were given up and replaced by a system of division correspondent with that used for administrative and political purposes. In each district a Forest Administration was thus formed, which was independent of the corresponding political administration and subject only to the Central Forest Administration.

This organization, somewhat modified, has been preserved until today.

In 1890 the Central Forest Administration was divided into two departments — an administrative and a technical department. The administrative department has charge of matters regarding rights of property, the choice of employees, fines for infringement of rules, etc ; the technical department is responsible for the employment of the woods, reforestation, plantations, etc.

As regard woods felled by the State directly, or forming the subject of grants, Special Forest Administrations have been created which are independent of those of the districts and subject only to the Central Administration. The formation of a Special Forest Administration terminates the competence of a District Administration.

The staff of the Ministry of Finance includes an adviser on questions concerned with the forest policy of the country.

The forest organization which we have described is not free from faults, especially as regards the division into local administrations. The forests are, as has been said, distributed unevenly about the different districts, some of these being more richly wooded than others. It follows that some local administrations have the care of extensive wooded territories, difficult to superintend ; others only that of small woods. Hence there is need of a more reasonable division for purposes of forest administration, which would take into account the natural distribution of forests in the different parts of the land of Bosnia and Herzegovina.

The government has hitherto not decided to form new institutions which would cause the faults of the old bureaucratic machinery of the forests to disappear. The Special Administrations which have been formed, and of which we have already spoken, have however given sufficiently good results.

RUSSIA.

THE RESULTS OF THE NEW AGRARIAN REFORM.

SOURCES:

1) Землеустроенныя Хозяйства). The Farms made by the Land Readjustment Commission). Petrograd, 1915.
2) Обслѣдованіе Землеустроеннаіхъ Хозяйствъ. (Enquiry into the Farms made by the Land Readjustment Commission). Petrograd, 1915.

The agrarian reformation in Russia, which had its first real foundation in the imperial ukase of 9-22 November 1906, as to the emigration of peasants from the rural community (*Mir*), has often occupied our attention in this Review. In April 1911, on the occasion of the fiftieth anniversary of the first great land reform — the abolition of serfdom in the Russian State — we published an article called " La réforme agraire et la banque foncière des paysans ". In November 1913 and January 1914 we treated the same subject in the article " General Outline of the New Russian Land Reforms ", and finally in June and July of last year we published a very detailed article, " The Great Agrarian Reform of 1907-1914 and its Results ". Thus the basic features of the agrarian reformation have been sufficiently explained, and we have at present to concern ourselves only with its results, its realization in practice, its consequences for the rural population, and the extent to which it has in general brought about a redistribution of the land.

A conclusive opinion on these points cannot yet be given — the period for which this great revolution has affected the conditions of land tenure is still too short — yet already a tendency may be detected in that direction in which future progress will probably be made.

Development has from the beginning been very rapid, as the year's report of the Commission for Land Readjustment proved. Several hundred thousand peasants were stated in this report to leave the fellowship of their village community annually, to enfranchise their strips of land from the property of the community and from the burden of " flurzwang ", and to settle as landowners, instead of mere occupiers of the collective *Mir* lands, either singly or in groups, on their self-contained plots of land. After the agrarian commission had been at work for five years more than a million self-contained peasant properties in severalty had been formed, and their number is now almost half that of all peasant holdings. It has become very important to discover what is the economic condition of these peas-

ant properties, and what enterprise they allow. This fact induced the directors of Land Readjustment and Land Organization in the present Ministry of Land to undertake, in the autumn of 1913, an enquiry as to the farms, and to publish their resultant conclusions in 1915 in two volumes, namely (1) *An Enquiry into the Farms established in the Country*, Petrograd, 1915, which contains only statistics ; and (2) a memorial (*édition de luxe*) entitled *The Farms established in the Country*, Petrograd, 1915, which is provided with excellent maps and with very well executed diagrams.

We will notice the points in these works which most importantly characterize the results of the Russian agrarian reformation.

§ 1. The organization of enquiry.

As the aim was to give only a rough idea of what had been accomplished in the country by agrarian reform, the enquiry was not carried into all the provinces of European Russia in which properties in severalty had been formed, but twelve provinces were chosen, lying in the different districts of the State and having most interest in the land settlement. Within these provinces all the farms held in severalty which had been founded by the Land Readjustment Commission on the *nadiel* (1) lands, on the crown lands or on those of the Peasants' Land Bank, and which had been in enjoyment of the new conditions for at least three years before the spring of 1911, were examined. Farms which had been in the actual possession of the peasants for only twelve years were excluded from the scope of the enquiry. The following table shows which provinces were chosen and the number of farms held in severalty lately formed in them:

North and North west Region.

Provinces	Total number of farms inspected
1. Mologa (Government of Jaroslav)	377
2. Sitschevka (» » Smolensk)	1,506
3. Troki (» » Vilna)	3,091
4. Ostrov (» » Pskov)	1,570
5. Rschev (» » Tvjer)	758
Central Region.	
6. Orjel (Government of Orjel)	1,461
7. Jepifany (» » Tula)	1,509
Carryover . . .	10,272

(1) Nadiel – i. e. the portion of land given to a peasant at the time of his enfranchisement.

Provinces	Total number of farms inspected
Carried over . . .	10,272
Southern Region.	
8. Krementschug (Government of Pultava) . . .	2,302
9. Bogoduchov (» » Charkov) . . .	3,986
10. Berdjansk (» » Taurien). . . .	2,227
Eastern Region.	
11. Krasmoufimsk (Government of Perm)	1,322
12. Nikolajevsk (» » Samara) . . .	2,200
Total . . .	22,399

In the first three districts some provinces are said to be hampered by a scarcity of land: such are provinces 1 and 5 in the northern, province 6 in the central and provinces 8 and 9 in the southern region. Province 12, Nikolajevsk, in the eastern region was included in the enquiry because notices very often appeared in the press which described the position of the farms formed in it as being very bad, and connected the radical politics of its population with the land settlement. To distinguish the provinces further we add that *houtor* (1) farms prevail in provinces 3 and 4 and *otroub* (1) farms in the others.

The enquiry was conducted in every province under the direction of a provincial committee, constituted of the marshal of the provincial nobility as president, the president and other members of the directing body of the provincial zemstvo, a member chosen by the governor and one nominated by the ministry. The local agricultural specialists, zemstvo leaders and others might be co-opted by the committee as advisers. Such a combination gave the best guarantee for the committee's complete unbiassed and adequate opinion. The enquiry itself — the filling up, there and then, of the schedules of printed questions — was at first carried out by those members of the Land Readjustment Commission who could be momentarily set free from their customary work — agricultural specialists, land-surveyors and so forth. In order better to unify the work, and make more exact and complete the answers to the scheduled questions, district leaders and chiefs were chosen and subjected to the committee.

The whole number of those employed on the enquiry in the twelve provinces was 283. Of these 223 obtained answers for the scheduled questions, and there were forty-five district leaders and fifteen district chiefs. The following table shows their social standing and callings:

(1) The Russian words *houtor* and *otroub* are not easily translated. Both signifiy forms by which the peasants hold their self-contained farms in severalty. The distinction in that while in *houtor* farms the dwelling house stands among the fields, in *otroub* farms is separated from them (otroubitj = to separate).

Persons employed	Districts													
	Krasnoufimsk	Sitschevka	Rschev	Mologa	Troki	Ostrov	Orjel	Jepifany	Bogoduchov	Krementschug	Berdjansk	Nikolajevsk	Total	Percentage of whole number
	Persons													
Agricultural specialists:														
Government	1	1	3	—	6	1	2	4	15	—	—	2	35	12.4
Zemstvos	3	5	2	4	—	5	1	2	—	6	—	3	31	10.9
Instructors in the several branches of farming:														
Government	—	—	—	—	—	—	—	11	2	—	—	—	13	4.6
Zemstvos	—	—	—	—	—	8	—	—	—	2	—	—	10	3.5
Farming superintendents and experts:														
Government	2	—	—	—	—	—	4	1	33	—	—	—	40	14.1
Zemstvos	—	15	8	—	—	8	—	—	—	7	—	—	38	13.4
Surveyors	—	—	1	1	—	—	2	1	—	—	—	—	5	1.8
Surveyors' assistants	—	—	4	4	—	—	5	6	—	—	—	6	25	8.8
Presidents and secretaries of farmers' societies	2	1	—	—	—	—	—	—	—	13	—	—	16	5.7
Students of the Agricultural Schools	2	1	4	—	—	1	2	—	3	—	2	3	18	6.4
Others (Zemstvo leaders, teachers in popular schools, officials of local corporations, etc.)	—	—	—	—	20	4	8	3	—	—	14	—	52	18.4
Total	13	23	22	9	26	27	24	28	53	28	16	14	283	100

As appears from this table more than half those who took part in this enquiry were public servants. The agricultural specialists, the instructors in the different branches of farming, the farming superintendents and experts form the most numerous group, 60 per cent. of the whole number. The agricultural specialists of the government and the zemstvos were present in almost equal numbers. More than 64 per cent. of the whole number of persons taking part in the enquiry had had special training in agriculture.

In general, only those were called upon who had their fixed dwelling in the province which was being investigated and were thus very familiar with local conditions.

§ 2. The procedure of enquiry.

The procedure of enquiry into the farms held in severalty was throughout uniform. For every peasant farm a schedule of questions made on one pattern was drawn up, comprising about 150 questions. The first page of the schedule held for the most part questions which could be answered in terms of figures, the other page such as were answerable in words. The shedule contained, when filled up, the following data: area of the investigated place, type of farm — whether *houtor* or *otroub* —, date and description of its formation, number of family and of hired labourers, distribution of land according to crops, yield, herds pastured on it. rent, economic position, collective property etc. Remarks were added as to epidemics which might have occurred, damage done by hail and fire, and other factors which had importantly affected the fortunes of the farm, as to purchase and sale of land and succession to it, etc. The answers to all these questions, except those concerned with the yield of grain and fodder, were given with regard to the time of the enquiry as well as for the last years before the land settlement, with a view to making a comparison possible.

In addition to the schedule for single farms another was drawn up to be used for a whole settlement (village); and containing about ninety questions as to the proportion of *houtors* and *otroubs* in the village, holdings of which the parcels were not united, the works of the Land Readjustment Commission, earlier employment of the land, the price of the land and the amount of rents, all in reference both to the period after the divided strips of holdings had been united and that in which they lay scattered.

In the different provinces the enquiry occupied the following periods:

Provinces	Enquiry began on	Enquiry ended on	Period of Enquiry in Days
1. Ostiov (Gov. of Pskov)	18 September	1 November	45
2. Sitschevka (» » Smolensk) . . .	23 »	1 »	40
3. Troki (» » Vilna)	23 »	10 »	49
4. Rschev (» » Tvjer)	28 »	20 October	23
5. Mologa (» » Jaroslav) . . .	1 October	1 December	62
6. Orjel (» » Orjel)	1 »	30 October	30
7. Jepifany (» » Tula)	6 »	5 November	31
8. Bogoduchov (» » Charkov)	7 »	7 December	62
9. Nikolajevsk (» » Samara)	10 »	5 »	57
10. Berdjansk (» » Taurien)	11 »	29 November	50
11. Krementschug (» « Pultava)	14 «	22 »	40
12. Krasnoufimsk (» » Perm)	19 »	2 December	45

On an average the enquiry lasted for about a month and a half. When the schedules had been filled up as completely as possible they were remitted to the Committee for Opportunities of Land Settlement, registered with it, and collated and elaborated during the year 1914. The investigated farms were then classified according to their chief distinguishing mark — whether they were situated on *nadiel* land or on crown and Peasants' Land Bank land. These separate groups were then subdivided, the *houtor* and *otroub* farms being distinguished from each other. The following distribution resulted :

A. *Farms on the Nadiel Land.*

I. *Houtor* farms on which the farm buildings and dwelling-house of earlier peasant farms were transferred to a new site.

II. *Houtor* farms on which there was no transference of buildings, because when the parcels of land of the holding were united all the land surrounding the farmyard was included with them. This took place most frequently in the farms where landownership is economically lowest, and where therefore the cost of transferring buildings and making a farmyard was too much for the owners.

III. *Otroub* farms.

B. *Farms on Crown and Peasants' Land Bank Lands.*

I. *Houtor* farms where the steading has been established on a new site.

II. *Otroub* farms, where the steading has been transferred, and established in a hamlet. The difference between these two groups is slight, be-

cause the hamlets referred to consist of a very small number of buildings, and therefore in the second as in the first group the parcels of land belonging to a farm are in the direct neighbourhood of its steading

III. *Otroub* farms where there has been no new settlement.

The groups were then further subdivided, according to whether all the land of a farm had been united, or certain parcels of land, as yet undealt with, remained attached to the farms.

Five groups were made according to the size of the estates.

(1) Farms of up to 5 deciatines (1) land
(2) " " from 5 " " to 10 deciatines
(3) " " " 10 " " " 15 "
(4) " " " 15 " " " 25 "
(5) " " more than 25 "

As some farms had been so changed after the agrarian reformation that they could hardly be included in this classification they were separately investigated. They were: (1) farms which after the land settlement were divided by inheritance; (2) farms entirely sold after the land settlement; and finally (3) farms having owners who did not live on them or farm them as their principal business.

As before stated the elaborated material was published in two volumes by the Ministry of Agriculture in 1915.

§ 3. CHARACTERISTICS OF THE INVESTIGATED PROVINCES, ESPECIALLY FROM THE POINT OF VIEW OF THE ACTIVITIES OF THE AGRARIAN ORGANIZATION.

North and North West Region.

1. The province of *Mologa* in the government of Jaroslav has an area of 432,516 deciatines, and a soil generally of sandy loam which grows more fruitful as it verges towards the south. The population is about 150,000, of whom more than 90 per cent. are villagers. The peasants own 254,000 deciatines of land, or 58.6 per cent. of the area of the whole province: of this land 160,000 deciatines are *nadiel* land. The average holding of a peasant is of 5.6 deciatines. The conditions of ownership and the utilization of the soil are unfavourable to development: parcels of land in one ownership are scattered within one village, and there is *nadiel* land owned in common by several villages. Holdings are moreover much divided into scattered strips. Climatic conditions are also undesirable. All this makes agriculture difficult and drives the population to seek opportunities in neighbouring districts.

The Land Readjustment Commission began work in this province in May 1908, at first separating the single villages in order to undertake the combining of the lands of the respective holdings in each village, and to

(1) 1 decjatine = 2 acres 2 roods 31.9555 poles.

form *houtor* and *otroub* farms. Up to 1 January 1911 only 377 holdings in severalty, having a total area of 3,822 deciatines, were thus called into being: 320 of them (2,748 deciatines) were on *nadiel* land and fifty-seven (1,074 deciatines) on lands of the Peasants' Land Bank. After however the amount of scattered parcels of land in single villages had diminished the formation of holdings in severalty became much more rapid and their number attained on 1 January 1915 to 1,279, having an area of 9,707 deciatines (6.1 per cent.), the average area of a farm being 7.5 deciatines.

2. The province of *Sitschevka* in the government of Smolensk embraces an area of 253,273 deciatines, of which 8 per cent. is wooded. The soil is not fertile. The population is more than 135,000, of whom 94 per cent. are a rural population. Farming is here the principal industry. *Nadiel* land forms 61.1 per cent. of the whole area; the average farm is of 7.6 deciatines.

Many properties are formed of scattered pieces of land — the holding of a peasant being often divided into a hundred parcels, many of which are at a distance of as much as ten versts (1) from his steading.

The land organization authorities began in October 1906 to set up here a Commission for Land Readjustment, whose work was much protracted and almost entirely confined to making the lands of one holding contiguous and the formation of *houtor* and *otroub* farms in single villages. During the course of their enquiry 1,601 holdings in severalty were established with a total area of 13,486 deciatines, and from these 1,506 farms had been formed up to the year 1911 and ninety-five arose as a result of subdivision.

On 1 January 1915 the number of newly formed peasants' farms was 3,703, that is 18.1 per cent. of all the peasants' farms in this province, and their total area was 31.279 deciatines (20.2 per cent.). The average area of a single farm was 8.4 deciatines.

3. The province of *Troki* in the government of Vilna has an area of 485,355 deciatines. The soil is on the whole not fertile. The population numbers 250,000, almost entirely villagers. Their chief industry is farming. The *nadiel* land has an extent of 213,264 deciatines (43.9 per cent.), of which the greater part belonged in the time of serfdom to State peasants. The average peasant holding measures fifteen deciatines. Peasant cultivation was here exclusively on the holding in severalty system, and *houtor* and *otroub* farms were found ready to hand by the land organizers.

The Land Readjustment Commission was established here in September 1906; and up to 1 January 1911, 3,091 farms held in severalty, with a total area of 32,319 deciatines, were formed on the *nadiel* land. On 1 January 1915 the number of newly formed farms had reached 5,985 (42.1 per cent.) and they had a total area of 61,301 deciatines (28.7 per cent.). The average extent of a peasant farm made by the commission is 10.2 deciatines.

4. The province of *Ostrov* in the government of Pskov has an area of 453,660 deciatines. The soil is almost throughout heavy or rather heavy sandy loam. The population is 200,000, of whom 96 per cent. are

(1) 1 verst = 1166.322 yards.

villagers. Agriculture is the principal industry. The *nadiel* land of the peasants measures 226,268 deciatines (51.9 per cent.). They own also 75,000 deciatines of additional bought land, making a total of 70 per cent. of the whole area.

Until the time of the agrarian reformation the land was exclusively held collectively (*obstschina*) and the average peasant tilled 8.3 deciatines.

The Land Readjustment Commission was established here in September 1906. Up to 1 January 1911, 1,570 peasants' holdings in severalty were formed, which by the effect of inheritance during the time of the enquiry came to number 1.62. Of these 1,100, having an area of 9,798 deciatines, are on *nadiel* land; and 524, measuring 8,850 deciatines, on the lands of the Peasants' Land Bank. Since then the number of self-contained peasants' farms has largely increased. On 1 January 1915 the total area of the *nadiel* lands surveyed was 35,931 deciatines, and of them 32,206 deciatines (14.3 per cent.) were included in 3,851 *houtor* and *otroub* farms — 14.2 per cent. of all the peasants' farms. The average extent of a newly formed farm in severalty was 8.4 deciatines.

5. The province of *Rschev* in the government of Tvjer has an area of 350,894 deciatines. The soil is predominantly sandy loam. The population is about 200,000, including 177,000 (88 per cent.) villagers. Agriculture is the principal industry. The *nadiel* land extends over 188,578 deciatines (52.9 per cent.). The peasants have bought in addition some 70,000 deciatines. The average area of a farm is 7.5 deciatines. Up to the time of the Land Readjustment the *nadiel* land was exclusively held collectively, and in most villages there were from twenty to forty separate strips of land in each farm.

The Land Readjustment Commission was established here in May 1909 and in accordance with the wishes of the people began at once to separate the scattered parcels of land in single villages and unite them together. Up to 1 January 1911, 776 farms in severalty were formed (18 of them arose through division by inheritance), having a total area of 6,411 deciatines. Later there was further development, and the number of newly created *houtor* and *otroub* farms reached, on 1 January 1915, 3,429 (13.8 per cent.), and had a total area of 35,308 deciatines (18.5 per cent.). The average area of a newly formed peasant farm held in severalty was 10 deciatines.

The Central Region.

6. The province of *Orjel* in the government so-called has an area of 268,328 deciatines. The soil in the north is sand and sandy loam, in the south black earth. It is not well watered. The population is 277,000; including 182,000 (65.7 per cent.) villagers. The factories of the province and the various accessory branches of industry take about half the population off the land. The area of the *nadiel* lands was 158,322 deciatines, of which 88,382 deciatines (55.8 per cent.) belonged to the former serfs of private landowners, 66,026 deciatines (39.2 per cent.) to the former State peasants, and 7,914 deciatines (5 per cent.) to the peasants who belonged to the administration of appan-

ages. The peasants have bought other 24,000 deciatines of land. Common ownership of the soil is here almost universal, and generally the *nadiel* common lands of several villages lie together, being called "many-village commons", or "one-place settlements".

The Land Readjustment Commission was established here in September 1906 and began its work by separating the common lands of single villages and the formation of self-contained peasant farms in such villages. On 1 January 1911, 1,461 farms held in severalty had been constituted and thirteen have arisen by inheritance. Of these newly formed farms 1,198, with a total area of 8,149 deciatines, were on *nadiel* land, and 276, having an area of 3,424 deciatines, on lands obtained from the Peasants' Land Bank. On 1 January 1915, 32,867 deciatines of land were surveyed by the Land Readjustment Commission which belonged to 5,112 owners of farm steadings. On this territory 1,934 *houtor* and *otroub* farms (7.2 per cent.) were formed, having a total area of 12,813 deciatines (8.1 per cent.). The average extent of a farm held in severalty was 6.6 deciatines.

7. The province of *Jepifany* in the government of Tula has an area of 209,859 deciatines. The inhabitants number 143,000, including a rural population of 137,000. The principal industry is farming, farm products being worked up in the factories of the province. The peasants' land extends over 115,400 deciatines (49.2 per cent.), of which 103,330 deciatines are *nadiel* land. The average area of a farm is 4.6 deciatines. Almost all land is here held in common (*obstschina*) and the parcels of land are much scattered.

The Land Readjustment Commission established itself here in May 1907. Up to January 1911, 1,509 farms held in severalty were constituted, having a total area of 16,724 deciatines and lying entirely on land obtained from the Peasants' Land Bank. In course of time the commission extended its operations to *nadiel* land. Up to 1 January 1915, 4,232 *houtor* and *otroub* farms were formed, making 18.8 per cent. of all the peasants' farms in the province and having a total area of 14,687 deciatines (14.2 per cent.). The average extent of a newly formed farm is 3.5 deciatines.

The Southern Region.

8. The province of *Krementschug* in the government of Pultava has an area of 305,680 deciatines, of which about 200,000 deciatines (65 per cent.) are held by peasants. The former peasants of the State hold the chief part of the *nadiel* land, 78 per cent. The average extent of land tilled by a holder is 3.8 deciatines. The inhabitants number 325,000, of whom three quarters are a rural population. More than 73 per cent. of the people are engaged on farming. The isolated farm steading system is almost universal, obtaining in 82 per cent. of all the peasant farms; and the scattered parcels of single holdings are here, as elsewhere in the government of Pultava, much entangled.

The Land Readjustment Commission was established here in July 1907. Numerous demands for settlement of land met it at once. Yet the separation of single villages from a union of communities was attended in many

cases with difficulties of a legal character, until the issue of the law of 29 May 1911 which in many ways extended and completed earlier land settlement laws. Nevertheless the commission succeeded in bringing 2,392 farms held in severalty into being before the beginning of 1911: of these 1,739 were on *nadiel* land and 563 on land of the Peasants' Land Bank. After the issue of the law of 29 May 1911 the number of the newly formed farms was much augmented: in 1915 there were 8,316 *houtor* and *otroub* farms on *nadiel* land only, having a total area of 26,987 deciatines (17.6 per cent.). The average area of a single farm was 3.2 deciatines.

9. The province of *Bogoduchov* in the government of Charkov has an area of 269,876 deciatines, of which 73,950 deciatines (two thirds) are *nadiel* land. The soil is black earth. The chief industry of the population of 202,000 is farming, which employs 80 per cent. of them. In the sugar refinery and various trades there is much possibility of employment. Until the agrarian reformation the land in more than 70 per cent. of all the villages in the province was held in common (*obstchina*) and remarkable for the degree to which the holdings were split up and the parcels of them scattered. Immediately after the establishment of the Land Readjustment Commission in September 1906 they met with so many demands on the part of the peasants for the union of the scattered fractions of their holdings, that they could hardly attend to all of them. On 1 January 1911 there were already in existence 3,986 farms held in severalty, of which 3,818 were on *nadiel* land, 156 on land acquired from the Peasants' Land Bank and eleven on crown land. At the time of the enquiry of 1913, 119 more holdings had arisen through subdivision by inheritance. On 1 January 1915 the work of the Readjustment Commission had ended, having brought into being 17,247 farms having an area of 76,155 deciatines; and of these 13,647 farms (41.6 per cent. of all peasant holdings), having an area of 62,983 deciatines (36.2 per cent.), were *houtor* and *otroub*. The average area of a single farm was 4.6 deciatines.

10. The province of *Berdjansk* in the government of Taurien has an area of 811,281 deciatines. The soil is black earth and conditions are on the whole favourable to agriculture. The population is about 453,000, including a rural population of 385,000 (about 88 per cent.). Farming is the chief industry. The factories employ 10 per cent. of the inhabitants. The *nadiel* land extends over 715,000 deciatines (88 per cent.). The area of the bought land, whether acquired from common or collective holdings or individual peasants, is 23,000 deciatines. An average farm has an area of some 16.5 deciatines. Most of the land is held in common.

The Land Readjustment Commission began their work here in February 1907. On 1 January 1911 the district already included 2,234 farms held in severalty having an area of 31,944 deciatines, and of these 2,062 farms, extending over 28,428 deciatines, were on *nadiel* land, and 172, with an area of 3,516 deciatines on crown land. On 1 January 1915, 106,230 deciatines were held under the agrarian organization, and of these 104,662 deciatines (14.6 per cent. of the *nadiel* land) formed 9,717 (22.4 per cent.) *houtor* and *otroub* farms. The average area of a single farm was 10.7 deciatines.

The Eastern Region.

11. The province of *Krasnoufimsk* in the government of Perm has an area of 2,341,567 deciatines. Its eastern part is on the wooded and hilly projections of the Ural Mountains. The population (Russians, Bashkirs, Tatars, etc.) is 370,000. The chief industries are farming and mountain work, the latter absorbing 28 per cent. of the inhabitants. Peasants' farms number 52,000 and extend over some 910,000 deciatines of *nadiel* land (39 per cent.). The land is held in common and holdings are much divided into strips held in one or in different villages: from one to two hundred strips are scattered over from fifty to sixty villages.

The Land Readjustment Commission began its work here in 1907, first separating the villages from the unions of communities, and then making the lands of holdings contiguous and creating holdings, especially *otroub* farms, in the different villages. Up to 1 January 1911, 1,322 farms, having an area of 26,629 deciatines, had been formed.

The enquiry of 1913 concerned itself also with thirty farms which arose through subdivision by inheritance. The Land Readjustment Commission further extended its activities, and on 1 January 1915, 70,089 deciatines had been surveyed which belonged to 4,082 owners. Of this land 50,388 deciatines (5.5 per cent. of the the whole area of the province) were devoted to 2,640 farms held in severalty (5 per cent.), having an average area of 19.1 deciatines.

12. The province of *Nikolajevsk* in the government of Samara has an area of 2,642,549 deciatines. In its northern district the soil is the black earth of the steppes, on the whole a poor soil. The climate is dry and droughts are frequent. The population is 650,000; and — the province being very extensive — the density of population only 22.4 to a quarter verst. The villagers are entirely occupied with farming. In the eastern quarter Bashkirs are to be met with as well as Russians. The *nadiel* land covers 1,431,131 deciatines (54.1 per cent.), 868,479 deciatines (32.8 per cent.) are in private ownership; and 324,894 deciatines (13 per cent.) belong to the crown, the churches and various foundations. The average area of a farm is 21.8 deciatines.

Besides the divided state of the holdings and the long distances between the strips of a holding and a peasant's steading, the frequent bad harvests in this district which are a result of the great dryness, especially prevalent in latter years, determined the work of the Land Readjustment Commission. In October 1906 the commission was established here. Up to 1 January 1911, 2,220 farms, having an area of 80,413 deciatines, were formed: of these farms 1,346, extending over 55,279 deciatines, were on *nadiel* land; 809, with an area of 23,663 deciatines, on land of the Peasants' Land Bank; and forty-five, with an area of 1,471 deciatines, on crown land. At the time of the enquiry other twenty-seven farms had arisen as the result of inheritance. The commission has made great further progress here, especially latterly: on 1 January 1915, 14,020 *houtor* and *otroub* farms

(21.3 per cent.) had been formed, having an area of 318,719 deciatines of *nadiel* land. The average extent of a farm was 22.7 dciatines.

§ 4. Classification of the investigated farms according to the nature of their origin.

The investigated farms, 22,399 in number, formed — according to the nature of their origin or rather the form of their original tenure — three groups :

I. farms on *nadiel* land.
II. farms on lands of the Peasants' Land Bank.
III. farms on lands of the crown.

The following table shows the total size of each of these groups and its size in each of the twelve provinces :

Classification of Newly Formed Farms in Severalty according to the Nature of their Origin, in the Gross and in each Province.

	Provinces												In whole number of provinces
	Berdjansk	Bogoduchov	Jepifany	Krasnoufimsk	Krementschug	Mologa	Nikolajevsk	Orjel	Ostrov	Rschev	Sitschevka	Troki	
On nadiel land.													
Number of farms.	2,055	3,818	—	703	1,739	320	1,346	1,185	1,046	758	1,501	3,091	17,567
Total area in deciatines	28,428.3	24,822.3	—	17,337.4	5,347.1	2,747.9	55,278.6	8,149.3	9,798.4	6,440.5	13,485.5	32,318.5	201,153.8
On lands of the Peasants' Land Bank.													
Number of farms.	—	156	1,509	619	653	57	809	276	524	—	—	—	4,603
Total area in deciatines	—	1,307.5	16,723.5	12,291.8	6,394.9	1,074.3	23,663.7	3,424.1	8,849.6	—	—	—	73,729.4
On Crown lands.													
Number of farms.	172	12	—	—	—	—	45	—	—	—	—	—	229
Total area in deciatines	3,515.8	90.8	—	—	—	—	1,470.8	—	—	—	—	—	5,077.4
On all lands.													
Number of farms.	2,227	3,986	1,509	1,322	2,392	377	2,200	1,461	1,570	758	1,506	3,091	22,399
Total area in deciatines	31,944.1	26,220.6	16,723.5	26,629.9	11,742.0	3,822.2	80,413.1	11,573.4	18,648.0	6,770.5	13,485.5	32,318.5	279,969.6

From this table it appears that 17,557 self-contained peasants' farms were formed on the *nadiel* land by the Land Readjustment Commission, 4,603 on lands bought from the Peasants' Land Bank and 229 on crown land. The 429 farms which have arisen owing to subdivision by inheritance are not included.

On the *nadiel* land *houtor* and *otroub* farms were found in all the investigated provinces except the single province of Jepifany (government of Tula); they were on the bank lands in eight provinces and on crown lands in three.

Of the 14,567 farms on *nadiel* land answers to all the scheduled questions were received from 14,813. The farms having owners living away from them — 1,777 in number, those which were sold after the land settlement — 1,284 in number, and 323 farms which were subdivided by inheritance, were classified in a separate group of 752 properties, when the enquiry was elaborated.

The group of the farms on crown lands, which is small in number and differs little in character from that of those on lands of the Peasants' Land Bank, was united to the latter to form with it one group of 4,832 farms.

If therefore we except the farms subdivided by inheritance, and those as to which only incomplete data have been collected — whether because the owner does not live on his property or has sold his steading or for other reason — we have the following distribution of the farms investigated:

	Number of Farms		
	Houtor	Otroub	Total
On *nadiel* land.	4,825	9,358	14,183
On crown and bank lands . . .	1,517	3,315	4,832
On all lands.	6,342	12,673	19,015

Thus the *houtors* form one third of the whole number of farms investigated, which fact, as the report adds, shows a great increase in the former proportion of *houtor* to *otroub* farms.

Of the 17,567 farms on *nadiel* land investigated, 14.757 (84 per cent.) arose by the disentanglement and separation of the property of whole villages, 2,810 (16 per cent.) by the elimination of single owners from villages.

In the new conditions of the reorganization of the land the farms up to 1911 were as follows:

	1907-8	1909	1910	1911	Total for 1907-1911
Number of farms	1,499	3,169	9,562	2,337	17,567
Percentage of whole number.	8.5	18.0	54.5	19.0	100.0

As appears from these figures the majority of the newly formed peasants' farms in severalty — namely 73.5 per cent. (18.0 + 54.5) — had at the time of the enquiry enjoyed the new conditions created by the Land Readjustment Commission for not more than four years. This circumstance, this short existence of the new peasants' farms, should be very particularly noticed in forming an opinion on the results of the enquiry.

(To be continued).

MISCELLANEOUS INFORMATION RELATING TO AGRICULTURAL ECONOMY IN GENERAL IN VARIOUS COUNTRIES.

BRITISH COLONIES.

LAND SETTLEMENT IN BRITISH EAST AFRICA. — Commander Josiah C. Wedgwood. M. P. in *The Contemporary Review*, No. 609, September 19.

The government of British East Africa have prepared a scheme for land settlement embracing two million acres to which another million can be added, all without entrenching on native reserves. The greater part of this territory lies in the well watered glens of Leikipia, between the Maw and Mount Kenia, at an altitude of from 5,000 to 7,000 feet above the sea. Other detachments lie in the comparatively low Kavirondo land (4,000 feet) towards Lake Victoria, and along the pipe line between the Bura Mountains and Taveta (3,000 feet), in the cattle country of the Turkhana, and north of Kenia up to the Northern Uasin Njiro River (4,000-6,000 feet); but these three last are not yet surveyed. These vast areas are now surveyed in farms of 2,800 acres, but the Land Department believe that they could cut them down to farms of near 1,000 acres, and still arrange water for every farm. In many cases they could form whole colonies of farms good for coffee, which would not exceed 360 acres. There is room here, in any case, for 3,000 settlers on the land.

The lands are not badly situated even so far as transport facilities are concerned, and these will improve. The British East African government propose to offer these farms to all white officers and men who have fought in East Africa and may therefore be presumed to know what the prospects are, as conditioned by the excellent climate, agricultural conditions and exigencies of labour.

The conditions of the 999 years' lease are these :

« (1) Within five years the settler must have put £300 into his farm in the way of permanent improvements as well as 4*s*. an acre (for every acre held above three hundred) in either permanent improvements or agricultural machinery or stock. Two thirds of this expenditure must be incurred in the first three years.

" (2) A rent of 10 cents (1 $^1/_2$*d*.) an acre is charged. The rent is revisable as follows : after thirty-three years 1 per cent. ; after sixty-six years 2 per cent. ; and after ninety-nine years 3 per cent. on the improve-

ment value. At no subsequent revision shall the rent exceed 3 per cent. on the improved value ".

So the average 1,000 acre farm will pay £6.13*s*.4*d*. rent, and involve a further annual outlay of at least £88 for five years, in house, dip, kraal, fencing, cleaning, ploughing or stock. The lease, giving title to the land, can be issued within the month, on payment of small survey fees, and money may be raised on such a lease.

Quite half the settlers will grow coffee : it is the " rage " and the profits are enormous. Next to coffee in popularity will probably come cattle. Sisal and flax are out of the question on account of the machinery required, except under conditions of co-operation which cannot be presumed.

The land offered is attractive to the British and South African troops who fight in these regions. No fewer than 130 men of the Second Rhodesian Regiment have, on their own initiative, written to the governor to ask on what terms they could get land.

The difficulty in British East Africa is to obtain labour, and 2,000 or 3,000 new settlers — planters — will only increase the competition for labour and force up wages. The settler who wishes to succeed must have considerable capital at his disposal.

CANADA.

THE PACIFIC RAILWAY COMPANY'S SCHEME FOR COLONIZATION. — *Bulletin de la Société du Géographie de Quebec.* — Quebec, May-June, 1916.

There has been discussion as to the best methods of helping Canadian soldiers, and even other British soldiers who go to Canada after the war.

It is certain that a large number of soldiers will find themselves at the end of the war unemployed, if not homeless ; and many men who leave camp will be unable or unwilling to endure the restrictions of a sedentary life.

Lord Shaughnessy announced, when consulted on this subject, that the Pacific Railway Company of which he is chairman has prepared a whole vast scheme of colonization as an aid to a solution of the problem. It involves the preparation of a thousand farms in Western Canada which will be ready for occupation next spring.

These prepared farms will be placed at the disposal of soldiers of good character who wish to take up agriculture. They will not be given away, but the Pacific Railway Company undertakes to give facilities for purchase and peculiar advantages which will enable those who acquire them soon to become freehold farmers and to build up homes for themselves and their families.

The Pacific Railway Company believes that the population of these farms will be sufficiently numerous to support a school, a church and a model farm.

GREAT BRITAIN AND IRELAND.

LAND SETTLEMENT OF EX-SERVICE MEN. — *Agricultural Gazette.* London, 23 October 1916.

The Board of Agriculture has acquired under the provisions of the Small Holdings Colonies Act, 1916, for the purpose of a land-settlement colony of ex-service men, an estate of 2,363 acres near Pattington, in the East Riding of Yorkshire, about fifteen miles distant from Hull.

Vacant possession will be obtained on 6 April 1917.

The soil is a rich alluvium capable of producing very heavy crops.

This colony, when fully developed, will consist of a central farm of about 200 acres and sixty small holdings of " mixed farming " type, averaging about thirty-five acres in extent. The equipment of each of the latter will include a comfortable cottage and the necessary farm buildings for working the holding.

The central farm will be under the management of a director, and will be equipped with machinery, implements, horses, etc., whch will be let out on hire to settlers in need of them. It will in the first instance embrace the greater part, if not the whole, of the estate, portions of which will be taken away from time to time for the formation or extension of the settlers' holdings.

Selected applicants will receive preliminary training in that they will work on the central farm under the supervision of the director, receiving wages until such tima as they are considered capable of working a holding independently. They will then be allotted at a reasonable rental land near their cottages which, if of less extent than the average-sized holding above indicated, may be subsequently increased by further land taken from the central farm.

Applicants who are able to satisfy the Board that they have the necessary capital and experience may be allowed to take up holdings without preliminary training. Co-operative methods will be adopted for the purchase of requirements and the consignment and disposal of produce.

It must be clearly understood that the government do not propose to make direct advances of capital to ex-service men desirous of taking up holdings, but it is hoped that industrious men, even if possessed of but little capital of their own, by starting as workers on the central farm and at the same time cultivating a small plot on their own account, will gradually be able to increase the area under their own control until they are able to support themselves entirely from this source. Endeavours will be made to establish a system of co-operative credit to assist men of this class.

In the selection of settlers preference will be given, as between men of equal merit and qualifications, to those whose wives or sisters or daughters have, as the result of their employment on the land either before or during the war, acquired proficiency in milking or other farming operations.

ITALY.

1. THE INSTITUTION OF AN AUTONOMOUS MINISTRY OF AGRICULTURE. — *Gazzetta Ufficiale del Regno d'Italia*, Number 148, Rome, 24 June 1916.

By a decree of the General Lieutenant of the kingdom, dated 22 June 1916 (No. 755), and in response to a wish long expressed by Italian agriculturists, the Ministry of Agriculture, Industry and Trade was divided into two parts, of which one is concerned with agriculture and is called *Ministero per l'Agricultura*, while the other is concerned with industry, trade and labour and is called *Ministero per l'Industria, il Commercio e il Lavoro*. To the new Ministry of Agriculture have been assigned the general and especial services having reference to agriculture, agricultural instruction, agricultural industries, vegetable pathology and zootechnology, to the forests, communal domains and public rights, and to agricultural statistics, mines, hydraulics and meteorology.

To the Ministry of Industry, Trade and Labour, on the other hand, there have been assigned the services having reference to trade, industry and industrial, commercial and professional instruction, to weights and measures and the assaying of precious metals, to property in ideas and to economy in general, and the services entailed by the inspectorates of industry and labour, and by credit, social insurance and thrift, statistics and labour.

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2. TO ENCOURAGE THE BRINGING INTO CULTIVATION OF UNCULTIVATED LANDS AND THE GROWING OF CEREALS. — *Gazzetta Ufficiale del Regno d'Italia*, Number 249, Rome, 23 October 1916.

By a recently promulgated decree of the General Lieutenancy of the kingdom, and on the proposal of the Minister of Agriculture, a competition to which prizes attach has been opened for the provinces of the south, of Grosseto and Rome and the islands. Agriculturists who during the farming year of 1916-17 restore to cultivation lands long abandoned, and grow in them wheat, maize, oats and other cereals, may take part in the competition.

Prizes will be awarded at the rate of five liras (1) for a quintal (2) of wheat and three liras for a quintal of maize, oats or less important cereals, and may not amount to more than fifty liras for a hectare (3) of land brought into cultivation.

(1) 1.2611 liras = 1 *s*.
(2) 1 quintal = 1 cwt. 3.874 qrs.
(3) 1 hectare = 2 acres 1 rood 35.383 poles.

Besides such prizes co-operative societies, agricultural labourers' associations, and small farmers directly cultivating their lands may, as a supplementary prize, be reimbursed for a fifth of the cost of the chemical manures they have used.

With the same object of encouraging the manuring of lands especial facilities are accorded to small farmers, cultivating their lands directly, in Sardinia, in connection with the special competition for this island opened by a decree-law dated 1 October 1916.

The recently created Provincial Commissions of Agriculture (1) have, together with the agricultural institutions, the task of superintending the competition in each province and of judging it according to especial rules. The chief object is to ensure that in districts where corn growing is most casual a supplementary prize shall be given to whoever grows cereals on fresh land and thus increases his yield.

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3. THE NEW ORGANIZATION OF SUPPLY. — *Gazzetta Ufficiale del Regno d'Italia*, Number 184, Rome, 5 August 1916.

By a decree of the General Lieutenancy of the kingdom, dated 2 August 1916, No. 926, important regulations have been made " to facilitate the supply of the articles of food and merchandize commonly and largely consumed ". Since this decree constitutes one of the most important measures taken by the Italian government in the course of the present war, we think it may be useful to summarize its chief provisions.

It must first be stated that hitherto the supply of articles of primary necessity undertaken by the public administration has had several defects, inevitable through the nature of its organization. As a need became manifest, as the powerlessness of ordinary trade to meet some one of the country's many necessities was recognized, it was decided to entrust the new task to the State, and a special agency was created for the discharge of duties somewhat different from those usually falling to the administration. In this way there was improvised, on principles sometimes not of the purest, a complex organization which was scattered over different departments and was not always fitted to discharge its duties in the best possible manner. Eight different agencies, shared among four ministries, could not indeed have the co-ordination and the power necessary to carrying on without useless loss of time or money the work of supply. There was therefore a need for unification and co-ordination, on a single principle and under a single control, in order that effort might be clearly directed to the desired end. It is this unification which has been accomplished by the decree which has been cited. In it, as will be seen, both the objects at which the agencies of the government should aim, and the means they

(1) *International Review of Agricultural Economics*, October 1916, page 119.

may employ, are indicated. Their mandate is double : they must first supply, by purchases in foreign markets, the deficiencies of the national market, ascertaining by enquiries the quantities of goods needed ; and secondly they must defeat the action of speculators and monopolists.

Since governmental authorities cannot completely satisfy the demand of consumers nor alone overcome the difficulties of this time they must have the help of less important public institutions, of the large specific organizations which can on occasion constitute " autonomous consumers' associations " and thus collaborate, really effectively, with all the measures of the central organization of supply. The following are the principal provisions of the new decree.

For the duration of the war the Ministry of Agriculture is charged with the facilitation of the supply of foodstuffs and articles commonly and largely used. It is therefore enabled : 1) to buy merchandize of which there is a lack in the country ; *b*) to requisition merchandize, or failing it establishments for production, for the needs of the public administrations and the civil population ; *c*) to fix the maximum prices for sale to the public according to the decree of the General Lieutenant dated 27 April 1916, No. 472, and to see that they are applied ; *d*) to furnish, for sale to the public by means of the public local administrations, merchandize imported and requisitioned according to *a*) and *b*) ; *e*) to authorize, if necessary, the constitution of autonomous consumers' associations ; *f*) to regulate the sale and consumption of merchandize of which a lack becomes evident ; *g*) to take in general the measures necessary to the ends which have been indicated.

To carry out these provisions two special agencies have been formed within the Ministry of Agriculture — the central commission of supply and the temporary supply service.

Th first of these is presided over by the Minister or the Under-Secretary of State for Agriculture and is composed of the representatives of the different ministries, the director of the temporary supply service, citizens who are experts in trade and representatives of consumers' organizations. It makes decisions as to the import and requisition of products and commodities for the civil population ; the fixing of their prices and the conditions of their sale ; the subjection of merchandize to maximum sale prices and the amounts of such maxima ; the preparation and proposal of measures to facilitate supply and restrain the rise of prices.

Officials and experts having special knowledge may be attached to this commission to deal with the affairs of private individuals. The results of its deliberations are placed before the Ministry of Agriculture in order that opportune measures may be taken.

The powers of the existing office for the supply of corn are transferred to the temporary supply service, which also will be formed of State officials, experts assuming the character and responsibilities of public officials, and others.

The decree further establishes that the Minister of Agriculture can delegate particular functions to the prefects, who will be helped by a pro-

vincial consultative commission for consumption. They will themselves nominate and preside over this commission and it will consist of four members, chosen from persons having economic and commercial knowledge and from the representatives of the consumers.

Within the central commission there will be constituted: *a*) an administrative committee responsible for arrangements regarding purchases, sales and transport and for general administration ; *b*) a committee of appeal responsible for deciding appeals.

A revisory committee, formed of three members nominated by the Minister of the Treasury in agreement with the Minister of Agriculture, will supervise the administration and the finances of the supply service.

Finally in Article 11, one of the most important clauses of the decree, it is provided that, in order to exercice a moderating influence on the price of merchandize in general use, the communes, in agreement with the public institutions for benevolence and thrift, with ethical and religious bodies generally, with the *local co-operative societies* and with the citizens, may constitute autonomous consumers' associations, in which the responsibility of the founders will be limited by the amount of capital they contribute. The constitution of these associations will be recognized, and their by-laws will be approved, by a decree of the Minister of Agriculture issued in agreement with the Minister of the Interior.

These autonomous associations will form legal persons and will be subject to the superintendence of the prefect who will examine their accounts. In case of administrative disorder the prefect can dissolve the administrative council and name an extraordinary commissary, and if need be he can order the liquidation of the association.

A certain number of these societies have already been formed. They propose (1) to exercise on the markets a practical and restraining influence opposed to the artificial excesses of free speculation, and to help especially the classes in least easy circumstances in their purchase of articles of primary necessity. To attain this end, in accordance with the conditions and exigencies of local economic life, they *a*) give moral and material support to the formation, development and co-ordination of *co-operative societies ; b*) organize, on behalf of institutions and societies belonging to an autonomous association, collective purchases of the articles and products most essential to consumers ; *c*) instal and work workshops or establishments for production, etc.

There is no doubt that if associations of this kind be strongly formed and wisely administered, they can exercise a beneficent influence, in that they counteract local factors producing a rise in prices and constitute an element of stability. They will discharge their function more successfully in proportion as they succeed more and more in superseding speculators.

(1) See *Cooperazione Italiana*, No. 1209, Milan, 15 September 1916, for the scheme for by-laws of the autonomous consumers' associations, drawn up by the *Lega Nazionale della Cooperative*.

MEXICO.

REORGANIZATION FOR THE LAND SURVEY. — *Diario official.* No. 270. 6 September 1916.

In order to give a fixed basis to the distribution of the land tax the Mexican government passed on the 6th of last December a law dated 19 Septembre 1914 which recasts the organization for the land survey.

For the purpose of such recasting an especial commission, called *Junta Calificadora,* will be constituted in each of the different States of the Mexican Union, and will be responsible for registering real estate and for valuing it together with the capital invested in it. This commission will comprise the receiver of taxes, the municipal treasurer, and three persons liable to taxation who will be nominated by the presiding official of the communal government, and it ought to begin its work within eight days after the promulgation of the law.

By the terms of Article 5, " every proprietor or usufructory, owning or administering capital within the republic represented by urban or rural land, herds, and commercial buildings whether for purposes of industry or manufacture, is obliged to present within a month to the commission of the municipality of that territorial sphere, within which lies such property of his, a detailed description of this property ". In his declaration he should specify the situation and extent of his urban and rural real estate and the value of all the property in buildings which constitutes his capital. In the case of an expropriation in the public interest the government will have the right to pay to the interested persons, by way of indemnity, the value which has been declared and registered by the land surveyors.

The commission will examine each declaration submitted to it and, after using every available means of information, will ratify or modify the declared value of the real estate in accordance with the knowledge it has obtained.

Persons liable to taxation who do not conform to the provisions of the law within the prescribed interval are liable to a fine of an amount equal to one to five per cent. of the value of the undeclared real estate, which shall be valued by the commission in right of its office.

A right of appeal against the decisions of the commission is recognized in persons who believe these to have injured them. Appeals should be made in writing to the competent commission within fifteen days of the publication of the list of holdings of real restate and their values.

A commission for the inspection of the land survey will also be formed in the capital of each State. The municipal commission of the respective States will deliver to it the result of their labours, and its principal duty will be to decide on the appeals made by persons liable to taxation as to the amount of taxation at which their property has been assessed. This

inspecting commission will be constituted by the governor of the State, the treasurer, and three other members nominated by the governor.

When all differences have been settled the commission for inspecting the land survey will prepare three copies of the final list of holdings in real estate and the amount of taxation at which they are assessed. One copy will remain with this commission; the second will be delivered to the General Treasury of the State and the third to the Secretariat of Finance.

The taxes in each State and municipal taxes will be fixed on the basis of this list.

NOTICES OF SOME RECENT PUBLICATIONS RELATING TO AGRICULTURAL ECONOMY IN GENERAL.

BRAZIL.

WAGEMAN (DR. ERNST): Die deutschen Kolonisten im brasilianischen Staate Espirito Santo (*The German Colonists in the Brazilian State of Espirito Santo*), 151 pp., Munich and Leipzig, Dunker and Humblot, 1915.

This book is the result of a journey in Brazil and of an enquiry, made locally, into German colonization in the Brazilian State of Espirito Santo. The author was able freely to visit the chief colonizing governments in this State, could question people and himself make sure of the exactness of his information. A very fertile region, and one in which European colonization may he said hardly to have begun, was in question ; and there is no doubt that this study has contributed such useful knowledge and interesting facts on its subject as cannot be neglected.

The German colonists in Espirito Santo number about 18,000. German immigration to this State, which has taken place since the second half of last century, has brought into it between 2,100 and 3,500 persons who have been responsible for the existing groups of colonists.

In this connection the following figures are instructive. They refer to the whole period of immigration and show the enormous growth due to the relation between births and deaths.

Births	19,000	
Deaths	4,000	
Increase		15,000
Immigration.		2,500
		17,500

Thus in a period of from thirty to sixty-five years the German population of this place has been multiplied by seven, by the sole operation of the law of natural increase. This decides beyond doubt the question of the facility with which European immigrants become acclimatized in these regions; and proves the excellence of the climatic, hygienic and natural conditions of the State of Espirito Santo.

In order further to explain these facts we will give figures showing the number of births and deaths in 1911 and 1912 in terms of the percentage of the number of inhabitants in 1912 to which they were equivalent.

	Births	Deaths
Campinho	39 per cent.	7 per cent.
Santa Leopoldina. . .	50 » »	4.5 » »
Jequitiba	42 » »	8 » »
Kalifornia.	48 » »	7 » »
Santa Maria.	43 » »	7 » »
Santa Cruz	60 » »	10 » »
Santa Joanna	72 » »	14 » »

In the beginning the government of Espirito Santo distributed to the colonists allotments of land having an area of more than fifty hectares. The extent of the allotment was in time reduced by half and was finally fixed at twenty-five hectares for one colonist household. However, as a result of the changes of ownership resultant on purchase, inheritance and otherwise, some colonist families have contrived to occupy as much as twenty such allotments. Two or three of them may be taken to represent the average holding, which has therefore an area of fifty or seventy-five hectares. A holding of seventy-five hectares is cultivated on the following plan :

1. Coffee	1 ½ to 2 hectares
2. Maize.	4 » 6 »
3. Tubers	1 »
4. Pasture	4 »

This accounts for hardly a sixth of the whole property. From ten to twelve additional hectares may be taken to represent land tilled but not planted, and the rest is occupied by forests.

Colonists' holdings on the plain differ somewhat from those at a greater elevation, in that on the former a larger share of the land is devoted to pasture, in proportion to the larger number of animals kept.

Coffee is the colonist's most important and often his only source of income and profit. The average coffee harvest of each individual colonist in Espirito amounts to from 100 to 150 arrobas (1). If he obtain a yield of from 250 to 300 arrobas he is in easy circumstances ; if his yield average from 500 to 600 arrobas for each member of his household he is wealthy. The average harvest of a colonist family of eight persons is about 1,200 arrobas. The total amount of coffee produced by the German colonists is about 450,000 arrobas, out of three and a quarter millions produced by the State of Espirito Santo.

(1) *Arroba* = 33.069 lbs.

GREAT BRITAIN AND IRELAND.

1. SAVAGE (W. G.): RURAL HOUSING (London, T. Fisher Unwin, 1915, pp. X + 11-297, pls. 16, figs. 5).

The author gives briefly the historical development of the housing problem in England and Wales and describes how the housing conditions may be improved. A brief review of the laws relating to rural housing and sanitation is included.

He summarizes his conception of the housing problem as follows: « Existing cottages are wearing or have worn out; economic causes prevent private enterprise erecting more in anything like sufficient and compensatory numbers; the local authorities will not build if loss is likely to fall upon the rates and the powers to make them are ineffective; the State, through the Local Government Board, exhorts and stimulates, but provides no pecuniary help; the problem is being solved in each place in which it arises by the migration to town or colony of some of the best of the agricultural working classes.

« If the shortage of houses is dealt with, the question of dealing with defective houses presents no great administrative difficulty. The remedy for defective houses is simple — it is more houses. If only there are enough houses the defective houses can be closed or made fit ».

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2. VISCOUNTESS WOLSELEY: *Women and the Land.* London, Chatto and W ndus, 1916 pp. 230.

This volume is written with the object of directing the attention ot women to subjects connected with the land. Topics " which may interes the practical woman farmer and market gardener " are treated, but the volume is " meant more especially to convey suggestions for good, sound, lasting work which could be carried out advantageously by lay people, those who have hitherto only been distantly brought into touch with food supplies and rural subiects. " Portions of the text have already appeared in *The Nineteenth Century* and *The Contemporary Review.*

Following an introduction of 17 pages are eleven chapters dealing successively with the various advantages of an increased interest of women in the land and the need for improved rural education and co-operation, of professional women farmers, etc. The question of the settlement of educated men and women on the land receives special consideration. The future peasant class, co-operation in agriculture, women's institutes (with particular reference to the social problem), the importance of teaching garden ing, of building up small holdings and of market gardening, better housing

for the labourer, the wages of the rural labourer, village industries, the education of village women and girls, and the woman gardener of the future, all find a place in this volume, which contains 16 photographic illustrations.

UNITED STATES.

WELD (L. D. H.) THE MARKETING OF FARM PRODUCTS (New York, The Macmillan Co., 1916, pp. XIV + 483).

The author's thesis is that marketing is a phase of production as defined by the professional economist. He defines production as the creation of utilities, that is, any process that makes a thing more useful, as by moulding it into more desirable forms in the factory, by transporting it from one place where it is less needed to another place where it is more needed, or by storing it from one season of the year when it is less needed until another season when it is more needed. He has treated this subject from this point of view under the headings of marketing at country places, methods of sale, functions and organizations of wholesale trade, sales by auction, cold storage as a factor in marketing, cost of marketing, transport as a factor in marketing, prices of farm products, produce exchanges, price quotations, future trading, inspection and grading, city markets and direct marketing by parcel post, co-operative marketing, problems of retailing, and weaknesses, remedies, and governmental activities.

RUGGERI ALFREDO, gerente responsabile.

(*c*) Publications of the Bureau of Agricultural Intelligence and Plant Diseases.

1. LE SERVICE DE PROTECTION CONTRE LES MALADIES DES PLANTES ET LES INSECTES NUISIBLES DANS LES DIVERS PAYS (The Present Organization of the Services for the Control of Plant Diseases and Insect Pests in the Different Countries). (1914, 350 pages, 4to) . . . . . Frs. 4.00
2. PRODUCTION ET CONSOMMATION DES ENGRAIS CHIMIQUES DANS LE MONDE (Production and Consumption of Chemical Manures in the World). (Second Edition, 1914, 162 pages, 5 diagrams, 2 maps, 8vo) . . . . . » 3.50
3. LA LUTTE CONTRE LES SAUTERELLES DANS LES DIVERS PAYS (The Campaign against Locusts in Various Regions) (1916, 188 pages, 8vo) . . . . . » 3.50

(*d*) Publications of the Bureau of Economic and Social Intelligence.

1. L'ACTIVITÉ DE L'INSTITUT INTERNATIONAL D'AGRICULTURE DANS LE DOMAINE DE LA COOPÉRATION, DE L'ASSURANCE ET DU CRÉDIT AGRICOLES (The Work of the International Institute of Agriculture in the Field of Agricultural Co-operation, Insurance and Credit). (In French, German and Italian). (1912, 34 pages, 8vo) . . . . . » 0.50
2. MONOGRAPHS ON AGRICULTURAL CO-OPERATION IN VARIOUS COUNTRIES, Vol. I. (1911, 451 pages, 16mo). (In English and French) . . . . . » 3.50
   Do. Vol. II. (1915, 213 pages, 8vo). (In English and French) . . . » 3.50
3. AN OUTLINE OF THE EUROPEAN CO-OPERATIVE CREDIT SYSTEMS (Second Edition, 1913, 72 pages, 8vo) . . . . . » 0.50
4. L'ORGANISATION DE LA STATISTIQUE DE LA COOPÉRATION AGRICOLE DANS QUELQUES PAYS (The Organization of the Statistics of Agricultural Co-operation in Certain Countries). (1911, 163 pages, 8vo) 1.50
5. L'ASSURANCE-GRÊLE DANS QUELQUES PAYS ET SES PROBLÈMES (Insurance against Hail in Some Countries and its Problems). (1911, 110 pages, 8vo) . . » 1.50
6. AGRICULTURAL CREDIT AND CO-OPERATION IN ITALY: SHORT GUIDE TO RURAL CO-OPERATION IN ITALY (in English, 35 pages and in Italian, 34 pages, 8vo] . » 0.25

(*e*) Other publications.

1. L'INSTITUT INTERNATIONAL D'AGRICULTURE, SON ORGANISATION, SON ACTIVITÉ, SES RÉSULTATS (The International Institute of Agriculture, its Organization, Activity, and Results). (1914, 31 pages, in English, French and Italian; illustr.] Frs. 1 —
2. LOUIS-DOP: LE PRÉSENT ET L'AVENIR DE L'INSTITUT INTERNATIONAL D'AGRICULTURE (CONFÉRENCE) (Present and Future of the International Institute of Agriculture) (Address). (1912, 60 pages, 8vo) . . . . . » 1 —
3. SANTIAGO ALDUNATE: EL INSTITUTO INTERNACIONAL DE AGRICULTURA Y SU IMPORTANCIA PARA LA AMÉRICA LATINA, EN ESPECIAL PARA CHILE (Conferencia) (The International Institute of Agriculture and its Importance for Latin America, especially for Chile). (1913, 30 pages, 8vo) (Address) . . . . » 1 —

II. Publications not for Sale.

1. CONFÉRENCE INTERNATIONALE DE 1905 POUR LA CRÉATION D'UN INSTITUT INTERNATIONAL D'AGRICULTURE (International Conference of 1905 for the Foundation of an International Institute of Agriculture), (1905, 254 pages, 4to).
2. ACTES DES ASSEMBLÉES GÉNÉRALES DES ANNÉES 1908, 1909, 1911, 1913 (Proceedings of the General Assemblies of 1908, 1909, 1911 and 1913). (Four volumes, 4to., one 8vo).
3. PROCÈS-VERBAUX DU COMITÉ PERMANENT DES ANNÉES 1908, 1909, 1910, 1911, 1912, 1913 (Procès-verbaux of the Permanent Committee, 1908, 1909, 1910, 1911, 1912, 1913, 1914 and 1915). (Five volumes, 4to., and two 8vo).
4. RAPPORTS ET ÉTUDES DU BUREAU DE LA STATISTIQUE GÉNÉRALE (Reports and Studies of the Bureau of General Statistics). (1911, 260 pages, 8vo).
5. THE SCIENCE AND PRACTICE OF FARMING DURING 1910 IN GREAT BRITAIN. (646 pages, 8vo).
6. ETUDE SUR LES RECENSEMENTS DE LA POPULATION AGRICOLE, LES SALAIRES DE LA MAIN-D'ŒUVRE RURALE ET LES COURANTS D'ÉMIGRATION DANS LES DIFFÉRENTS ÉTATS (Study on the Census Returns of the Agricultural Population, the Wages of Rural Labour, and the Currents of Emigration in the Several Countries). (1912, 150 pages, 8vo).

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